

Planning for Transit-Supportive Development: A Practitioner's Guide

Section 5: Local Planning and Transit-Supportive Development

JUNE 2014

FTA Report No. 0057 Federal Transit Administration

PREPARED BY

Dr. Colette Santasieri Director, Strategic Initiatives New Jersey Institute of Technology





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yd	yards	0.914	meters	m	
mi	miles	1.61	kilometers	km	
	VOLUME				
fl oz	fluid ounces	29.57	milliliters	mL	
gal	gallons	3.785	liter	L	
ft³	cubic feet	0.028	cubic meters	m³	
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	MASS				
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lb	pounds	0.454	kilograms	kg	
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FOREWORD

Public Law 109-59: Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005 identified funding for TELUS for Transit. With that funding, the New Jersey Institute of Technology conducted national research on transit-supportive development which culminated in "Planning for Transit-Supportive Development, A Practitioner's Guide." This guide is a toolkit of best practices, guidance, success stories, useful techniques, transferable examples, and lessons learned designed to assist Metropolitan Planning Organizations (MPOs), regional planners, transit agencies, local planners, and local governments with integrating transit planning with local land use planning. It provides a link between the regional, corridor, and local planning processes for integrating land use and transit. This guide is a resource document.

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ABSTRACT

"Planning for Transit-Supportive Development: A Practitioner's Guide" is a toolkit of practical and innovative measures to help Metropolitan Planning Organizations (MPO's), regional planners, transit agencies, and local government elected officials, staff, land use planners, and transit planners integrate transit planning with local land use planning. This guide includes best practices, guidance, success stories, useful techniques, transferable examples, and lessons learned, aimed at providing planners at the regional, corridor, and local levels with ideas on how to integrate, accommodate, and assess transit-supportive development and transit investment. Included are numerous success stories for integrating transit planning and land use planning. This guide seeks to go beyond just highlighting case studies by providing a link between the regional, corridor, and local planning processes for integrating land use and transit and examining regions that have successfully developed and integrated plans. The guide is meant to be a resource for planners to assist them in the development and implementation of strategies to integrate transit and land use planning in an effort to encourage transit-supportive development.

"Section 5: Local Planning and Transit-Supportive Development" presents information on station and transit-supportive development characteristics, and station neighborhood planning case studies. Planning for Transit-Supportive Development: A Practitioner's Guide

Section 5: Local Planning and Transit-Supportive Development

A. Transit-Supportive Developments: Typologies, Common Characteristics, and Key Considerations for Success

Prepared by: New Jersey Institute of Technology Van Meter, Williams, Pollack, LLP

The literature is rich in describing transit-oriented development, but little is written regarding the specific characteristics of such developments that contribute to their success. Recognizing that transit-supportive development is not one-size-fits-all and that locations and real estate market conditions affect its success, a study was conducted on a sample of developments within close proximity to transit stations. The results are reported in this section of the Guide. The purpose of the study was to identify some of the common characteristics of successful transit-supportive developments. The researchers created a typology of the developments as a way to further delineate the characteristics of transit-supportive developments. In addition, key considerations for planning and implementing transit-supportive developments were identified and are provided in this section.

Study Methodology

The following methodologies were used for the components of this study:

- Determining the study sample of transit-supportive developments—An initial set of 60 recognized transit-supportive developments was screened. Of the 60 on the list, 25 met the following criteria:
 - Contained within a connected, comfortable walking distance of transit, generally 1/4 to 1/2 mile
 - Includes a mix of at least three different land uses, including retail, housing, office, entertainment, transit facilities, and/or transit-facility parking
- Collecting data for 25 transit-supportive developments—Six research parameters were developed:
 - I. Location
 - 2. Transit orientation
 - 3. Land use
 - 4. Density and massing
 - 5. Site and building design
 - 6. Funding and process

A review of published literature, including Urban Land Institute (ULI) case studies, and interviews with planners and developers provided data for the 25 sites under each of the research parameters. (The 25 sites are included later in Tables 5A-1, 5A-2, 5A-3 and 5A-4.)

- Separating urban from suburban: For purposes of equitable comparison, transit-supportive developments were grouped into two broad categories urban and suburban. Due to location, scale, densities, and available amenities, urban and suburban projects have significant differences. Grouping the developments by urban and suburban assisted in the comparison of characteristics and in the determination of transferrable lessons learned. (Note: For the purposes of this study, the distinction between an urban area and a suburban area was based on the community context including existing land uses and densities.)
- Classifying transit-supportive developments: Recognizing that developments have varied relationships with transit, a transit-supportive development typology was created to classify the relationships. The logical groupings were used in an effort to compare and analyze transit-supportive developments. By separating the sampled transit-supportive developments into types, similar characteristics, common themes, elements, and factors for success were identified. Provided below is a detailed explanation of the transit-supportive development types.

• Analysis of data: Key data were analyzed through quantitative means (mean and median calculations) as well as qualitative means. Interviews with developers and planners garnered pertinent data, illustrated successes and failures involved in planning and constructing transitsupportive developments, and provided insights on the lessons learned real-life explanations beyond the basic statistics. The research results were synthesized to create a set of key considerations for planning and implementing transit-supportive developments.

Transit-Supportive Development Typologies

The term "transit-oriented development" (TOD) has been widely applied and accepted to mean a pedestrian-friendly community that extends for $\frac{1}{4}$ to $\frac{1}{2}$ mile from a public transit station and includes mixed uses, higher densities, and compact design. Beyond the standard TOD definition, the researchers developed a typology of transit-supportive developments that classifies them by their relationship to a transit facility. The relationships are based on the type and extent of planning initiatives that link the rail station and the transit-supportive development. Access between the station and the developments is a key factor of the definition. As part of this research study, four types of transit-integral development, transit-adjacent development, and transit-coincidental development. Each one is defined below. The sampled developments that correspond to each transit-supportive development type are also included.

Transit-Ready Development

A transit-ready development is a mixed-use development that is planned and implemented in concert with, and in anticipation of, future rail stations and implemented before the station is constructed (see Figure 5A-I). The developments occur in conjunction with adopted corridor plans. They have the advantage of being built early into the planning process, which means that zoning and design guidelines or codes can be developed in advance to accommodate the type of project envisioned. Transit-ready developments are generally initiated as government-supported ventures, with the intent of deriving maximum benefit from the development and redevelopment activities surrounding future transit expansion. Government plays a leading role in planning and financially supporting this type of developments identified in this study.

Figure 5A-1

King Farm Village, Rockville, MD

Table



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able 5A-1 Transit-Ready	Project Name and Location	Urban/Suburban Designation
Developments	King Farm, Rockville, MD	Suburban
ldentified in	Addison Circle, Addison, TX	Suburban
this Study	Gateway Village, Charlotte, NC	Suburban

Transit-Integral Development

A transit-integral development is a mixed-use or single-use development that is implemented in concert with station and corridor implementation (see Figures 5A-2 and 5A-3). These developments have significant connectivity with the proposed stations and have no access barriers to surrounding land uses. They have the advantage of early planning and are encouraged by zoning, code, and design controls that support their development. Table 5A-2 lists the transit-integral developments identified in this study.

Primary Transit Type

Commuter rail/future light rail

Bus

Bus



Source: Courtesy of Moule Polyzoides

Figure 5A-2

Gold Line at Archstone Del Mar, Pasadena, CA



Source: Van Meter Williams Pollack, LLP

Figure 5A-3 The Brewery Blocks, Portland, OR

Table 5A-2

Transit-Integral Developments Identified in this Study

Project Name and Location	Urban/Suburban Designation	Primary Transit Type
Del Mar Station, Pasadena, CA	Urban	Light rail transit
The Brewery Blocks, Portland, OR	Urban	Light rail transit, streetcar
Pentagon City, Arlington, VA	Urban	Heavy rail, bus
Bethel New Life, Chicago, IL	Urban	Heavy rail
Eastside Village, Plano, TX	Urban	Light rail transit
Arlington Town Square, Arlington Heights, IL	Urban	Commuter rail
Fruitvale, Oakland, CA	Urban	Heavy rail
Englewood Civic Center, Englewood, CO	Urban	Light rail transit, bus
Lorton Station, Fairfax County, VA	Suburban	Commuter rail
Prairie Crossing, Grayslake, IL	Suburban	Commuter rail
Orenco Station, Hillsboro, OR	Suburban	Light rail transit, bus
Mockingbird Station, Dallas, TX	Urban	Light rail transit, bus

Transit-Adjacent Development

A transit-adjacent development is a single-use or mixed-use development that has or is being implemented adjacent to rail stations and corridors where significant barriers (e.g., surface highways, arterial or freight rail corridors, parkand-rides, industrial or big block retail) separate stations from less intense land use (see Figure 5A-4). The developments are indicative of a lack of coordinated planning and/or coordinated agency decision making. While such developments can be made more user-friendly, the linkages and infrastructure costs are more expensive later in the development process. Table 5A-3 identifies the transitadjacent developments identified in this study.

Figure 5A-4

Southern Village, Chapel Hill, NC



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Table 5A-3

Transit-Adjacent Development Identified in this Study

Project Name and Location	Urban/Suburban Designation	Primary Transit Type
Southern Village, Chapel Hill, NC	Suburban	Bus
Del Norte Place, El Cerrito, CA	Urban	Light rail transit
Atlantic Station, Atlanta, GA	Urban	Heavy rail

Transit-Coincidental Development

A transit-coincidental development is a mixed-use or single-use development that builds on the success of previous developments surrounding stations and corridors (see Figure 5A-5). This type of development benefits from the placemaking features that exist in typically successful urban areas, where zone and code adjustments and financial investments have already been made. Table 5A-4 identifies transit-coincidental developments identified in this study.

Figure 5A-5

Paseo Colorado, Pasadena, CA



Source: Picasa, Courtesy of Steve Elkins, https://picasaweb.google.com/ 107562422527137332507/PasadenaPaseoColorado#5455025076380954578

Table 5A-4

Transit-Coincidental Developments Identified in this Study

Project Name and Location	Urban/Suburban Designation	Primary Transit Type
Mission Meridian, South Pasadena, CA	Urban	Light rail transit
Euclid Terraces, Oak Park, IL	Urban	Commuter rail, light rail transit
Rockville Town Square, Rockville, MD	Urban	Commuter rail, heavy rail
Paseo Colorado, Pasadena, CA	Urban	Light rail transit
Albina Corner, Portland, OR	Urban	Light rail transit, bus
Excelsior and Grand, St. Louis Park, MN	Urban	Bus
Tech Square, Atlanta, GA	Urban	Light rail transit

Common Characteristics of Successful Transit-Supportive Developments

Following are the common characteristics of transit-supportive developments identified in this study.

Planning Process

The majority (69%) of the transit-supportive developments studied were part of a coordinated local planning effort. Local government planning departments had taken steps to identify locations along transit corridors where higher density was desirable and worked to modify the existing zoning laws to allow mixeduse developments. Some jurisdictions, such as the City of Plano, Texas, used land-banking procedures—buying up properties over the years as they became available—to ensure the realization of their downtown arts district vision. The Town of Arlington Heights, Illinois, both purchased properties and enacted its powers of eminent domain. As part of its efforts to create a downtown in Arlington Heights, the municipality constructed public parking structures, parks, and infrastructure in advance of seeking out developers. At Excelsior and Grand in St. Louis Park, Minnesota, the municipality assembled the land, conducted neighborhood meetings, created new zoning based upon meeting outcomes, and conducted traffic and environmental studies before the developer was involved. This streamlined process saved the developer upfront costs and made the municipality an attractive partner for the development. In return, the municipality realized a development consistent with its vision.

In the case studies in which the developer approached the local government with the idea of transit-supportive development, it was incumbent upon the developer to educate the government and public about the community benefits of transitsupportive developments. In Prairie Crossing in Grayslake, Illinois, the developer spent two years working with the transit authority and local planners on issues of the development's financial feasibility and compatibility with the surrounding area and the required densities. In Atlantic Station in Georgia, the developer spent \$10 million in predevelopment funds and attended more than 2,000 public meetings in an effort to assure local and County officials and the public that this "new" type of development was feasible and beneficial.

Public/Private Partnerships

With few exceptions, the successful transit-supportive developments included in this study were public/private partnerships. These developments benefitted from some form of public/private partnership, in which one or more local public entities helped fund an aspect of the development. Table 5A-5 provides examples of developments and the incentives provided by local governments. In many cases, the local governments had already determined their desire for increased densities around transit stations and had begun preparing for future development well in advance of the development's planning. Examples of Tax Increment Financing (TIF), tax credits, waiving fees, and publicly-funded infrastructure are provided below. (For more information regarding TIF, see the "Funding and Financing Public Transit and Transit-Supportive Development" section.)

Tax credits such as New Market and Low Income are often used to help fund a portion of transit-supportive developments. In the case of the Bethel New Life Community Center in Illinois, the New Market tax credits enabled the receipt of additional funding from private banks and investors. Similarly, at Atlantic Station in Atlanta, the substantial bond allocation (\$75M) allowed private investors and co-developers to feel comfortable joining the project team for this untried development type. The Atlantic Station developers discovered that the more people invested, the more it encouraged others to invest in the project. This allowed them to comfortably develop the project during the economic downturn of the early 2000s. (For more information regarding Tax Credits, see the "Funding and Financing Public Transit and Transit-Supportive Development" section.)

Waiving local fees, while a seemingly small gesture on a local government's part, can make the difference in giving a project the needed amenities to make it successful. At Eastside Village in Plano, Texas, the municipality waived neighborhood park fees. This "saved" money allowed the developer to fund streetscape elements that were essential to creating a welcoming pedestrian environment.

Publicly-funded infrastructure is an aspect of public/private partnerships that is essential to success. In the case of Rockville Town Square in Maryland, the municipality funded the street and sidewalk improvements. In return, the municipality receives revenue from on-street parking and public parking garages located under the development. It is estimated that the public-sector costs will be recouped within 10 years.

Another aspect of public/private partnerships that requires little to no municipal upfront costs is local government approval of non-conventional construction. At The Brewery Blocks in Portland, the municipality permitted the construction of a large parking garage occupying underground street space, connecting all five blocks of the development. At Addison Circle in Texas, the municipality allowed the developer to place private utilities under the public streets and agreed to maintain the streets and other infrastructure.

Table 5A-5

Transit-Supportive Developments and Local Incentives

Project Name and Location	Incentives
The Brewery Blocks Portland, OR	The City allowed a parking garage to continue beneath the streets, making it much more efficient.
Eastside Village Plano, TX	The City allowed increased density and waived the neighborhood park fee; DART expedited platform construction and exchanged land for infrastructure.
Arlington Town Square Arlington Heights, IL	The City built public parking garages, new parks, and improved streetscapes prior to selecting developers for the Town Square.
Fruitvale Oakland, CA	The City banned construction of future parking near the village to help maintain a pedestrian character to the project and created a TIF District for the project.
Addison Circle Addison, TX	The Town allowed private utility systems throughout public right-of-way, amended building and life safety codes, allowed new pedestrian-friendly street standards, and agreed to maintain the infrastructure.
Excelsior and Grand St. Louis Park, MN	The City increased allowable densities and heights, assembled land, and created a new zoning designation.
Prairie Crossing (Station Square & Station Village, sw corner), Grayslake, IL	The City rezoned from I-acre minimum lots to as small as the developer wanted, providing that a minimum of 50% of the property was contiguous open space and that there would be no increase in the overall number of houses.
King Farm Rockville, MD	The City allowed a number of roads to be designated as private roads so they could be used towards parking requirements for the units.

Characteristics of Retail

The basic principles of standard retail development hold true for retail associated with transit-supportive developments—retail must serve the surrounding population, be aligned with area incomes, and be visible. The more urban a project, the higher the percentage of retail the project is able to support. All of the transit-supportive developments included in this study, regardless of their residential densities, relied on consumers from outside the community.

Retail has a better chance of succeeding when it is visible from a busy street and placed on the edge of a development rather than in the center of a development. The importance of transit proximity to the retail portion of these developments was not a key feature for the projects. In many cases, transit is located on the periphery of the project, and transit riders do not necessarily interact with the retail component. For instance, at Mockingbird Station in Dallas, most of the residents use the adjacent DART trains to commute to downtown jobs, and most of the retail customers from outside the area drive to Mockingbird Station.

Having a marquee tenant, such as a movie theater (Southern Village, NC) or a large department store (Englewood Civic Center, CO) draws people from a larger area who are more likely to support the development's other retail.

For the transit-supportive developments categorized as urban, the mean percentage of retail is 21 percent, and the median is 17 percent with a range of 2.5–46 percent. The percentage of retail floor area is more directly related to the location, the market share of the retail, and whether there was a retail shortage in the area prior to the development. Suburban projects had a mean retail percentage of 6.2 percent, with a median of 2.4 percent. Retail intensity for 4 of the 5 projects was under 3 percent, with one, Lorton Station, Virginia, at 23.6 percent. Lorton Station draws a significant volume of shoppers from a nearby existing neighborhood.

Residential Density Thresholds

Residential densities are dependent on the local market and context. There is no one-size-fits-all density formula to ensure project success. The mean residential density for urban projects is 36.3 units per acre, with a median density of 36. For suburban projects, the mean residential density is 17.4 units per acre, with a median density of 10.9. The difference in densities is primarily attributed to the type of housing. Urban projects consisted of more apartments and condominiums that compete with existing neighboring units.

The suburban developments, competing primarily with single-family developments, often have a low percentage of apartments or condominiums. Many rely on townhouses as a way to achieve higher densities in a primarily single-family market. Detached single-family houses, built as part of the transitsupportive developments studied, tend to be located on smaller lots in denser neighborhoods with sidewalks and shallow front yards, reminiscent of older traditional neighborhoods. The developer's challenge is to sell the lifestyle of the walkable neighborhoods, proximate to transit, to people who might be considering a car-oriented development with larger houses and lots.

Residential Optimum Floor Area Ratio (FAR)

Most project descriptions and available information do not identify specific unit sizes; rather, they provide a number of units per project and, in some cases, the total square footage devoted to residential uses. Since there were insufficient data regarding sizes for residential units, an assumed average residential size per unit was used to estimate FAR. The assumed average size takes into account the additional square footage used for circulation and accessory uses commonly associated with residential development and is based on common practices for the industry. For typical condominiums and apartments, an average of 1,200 SF was assumed. Townhouses were calculated at 1,800 SF and single-family houses at 2,400 SF. Senior and student housing units were assumed to be an average of 900 SF. Hotels were calculated using 500 SF per room.

The mean FAR for urban projects is 2.1, and the median is 1.37. Suburban projects have a mean of 0.65 and a median of 0.32. The significantly lower FARs for the suburban projects reflect the large amounts of open space often included in these developments and marketed as an amenity. Additionally, suburban transit-supportive developments tend to include more small-lot, single-family houses and fewer apartments, which, while denser than traditional subdivisions, decrease the amount of building on a given area of land compared to multi-story apartment buildings. Urban projects are more likely to build and successfully market apartments above retail. In suburban projects, the retail is often a separate component located near the transit station and within walking distance of some of the residences.

Based on common practice, a FAR of 1.2 overall, or approximately 87 residents and jobs per acre, is needed to support a vibrant mix of uses, public transit, and walking over driving.

Placemaking

Placemaking elements give a development or area an identity or "center." Determining a development's placemaking features (e.g., town green, river walk, main street) and their level of success is crucial to understanding how the developments succeed in providing an identifiable sense of place.

Many of the larger developments use placemaking features to give the project an identity. Many of the names of the developments reflect their placemaking features, such as Rockville Town Square and Atlantic Station (see Figure 5A-6). Table 5A-6 identifies larger transit-supportive developments and their corresponding placemaking features. Developments tend to cluster around the placemaking features with the greatest density in the area. While there is not one configuration of placemaking that is most successful or right for each situation, the visibility of the central space is highly important. The central square can draw people into a development, but only if they know it is there.

Figure 5A-6

Atlantic Station, Atlanta, GA



Source: Scott Ehardt, November 2005, released to public domain through Wikimedia Commons, http://commons.wikimedia.org/wiki/File:Atlantic_Station_ Regal_Cinemas.jpg

Table 5A-6

Larger Transit-Supportive Developments and Their Placemaking Features

Project Name and Location	Placemaking Feature
Englewood Civic Center, Englewood, CO	Civic Center Courtyard
Atlantic Station, Atlanta, GA	Town Square
Rockville Town Square, Rockville, MD	Town Square
Lorton Station, Lorton County, VA	Town Center Retail Area

Squares, plazas, and main streets are often used for community functions, such as farmers' markets, festivals, and movie nights. High visibility of the space is essential to make non-residents aware of the events. However, the plazas must balance visibility with the need for a safe, welcoming, pedestrian-friendly environment. This often requires traffic calming measures or relegating vehicular traffic to the development's outskirts. Trees and buildings lining the town square add a feeling of enclosure and being in a special place.

Locating retail uses around the town squares helped enliven the spaces, making them more inviting. Rockville Town Square and Mockingbird Station are successful examples. Conversely, the main plaza at Tech Square in Atlanta is surrounded by streets and office buildings without a retail presence. As a consequence, the plaza has an absence of vitality. Plans to add retail uses to the area, particularly cafés, are under way. A number of the smaller urban projects, such as Albina Corner in Oregon and Bethel New Life Community Center in Illinois, do not include a large public open space. The buildings might have a central courtyard for residents' use but there is no main placemaking feature. Rather than functioning as a destination, they are part of the urban fabric. Due to the small parcel or project size, the developments tend to have ground-floor retail that faces the street and interacts with the community. The projects contribute to the existing neighborhood and do not need placemaking elements to be successful.

Well-considered placemaking can create comfortable, dense, walkable communities that foster a sense of community and increase transit use. This was confirmed by a 2002 study of Orenco Station in Oregon, conducted by Lewis and Clark College. Residents noticed and reacted positively to the placemaking features that successful transit-supportive developments strive to incorporate. More than 90 percent of residents deemed the development's design and layout favorable. The sidewalks and the green open spaces that link the site allow the residents to access different places, making it possible to interact with their neighbors and feel like part of a community. Ninety-four percent of residents favored the design of Orenco Station over the design of traditional suburbs that require a car and parking space for nearly every trip. Residents at Orenco Station are more likely to use transit than the Portland metro area as a whole—22 vs. 6 percent.

Key Considerations for Planning and Implementing Successful Transit-Supportive Developments

The results of this study revealed several keys factors for planning and implementing transit-supportive development:

- Local governmental planning is essential. A local government that creates a transit-supportive plan and implements physical and regulatory infrastructure to support development makes that municipality more competitive, and ultimately more successful. As transit-supportive developments include more land development and land use density than traditional suburban development, transit-supportive developments require more coordinated transportation infrastructure.
- A public/private partnership is the most effective way of attracting developers for the kind of mixed-use, high-density developments that support transit. Local government support, whether financial or evidenced through modifications in zoning regulations, is a key element in attracting developers to build higher densities and mixed uses near transit. If local governments fund or offset the costs of infrastructure and recoup costs through other means, such as parking fees, then developers have a better chance of constructing enough housing/office/retail to create the quality and density necessary for the project to succeed. Local government activities may include purchasing and land-banking underused parcels as the money or

land become available, rezoning to allow greater densities or heights, creating redevelopment districts or empowerment zones to assist the developer in qualifying for additional funds and grants, and Tax Increment Financing.

• Parking is an essential element of a transit-supportive development and must be carefully considered by the local government and developer in the planning phase. Access to parking should be available without having to enter the most central retail portion of a development. It is important that cars can proceed down "Main Street" but not be forced into congested areas to access parking. For developments that rely on a mixed-use center, it is important for the retail patrons to easily access parking that is situated away from pedestrian-oriented streets.

Surface parking lots, although more cost-effective than structured parking, diminish the walkable feel of a transit-supportive development and require more land. However, structured parking is an expensive upfront cost. Projects were more successful in the cases in which local governments put up bonds to pay for the parking and recouped the cost through parking fees. Park-once strategies are another popular feature of transit-supportive developments, as shoppers park once and walk much more to the destinations because of the high-quality street design and pedestrian orientation. This reduces auto use within the development and helps anchor tenants as well as smaller retail shops and restaurants.

Reduced parking requirements that account for shared parking based on time-of-use help to keep costs down and minimize land or money devoted to vehicular parking. Parking can also be reduced based on proximity to transit, with the assumption that some residents and visitors will use transit, which reduces the number of car trips and the demand for parking.

• An effective street design is essential. The circulation network is important to pedestrian-oriented areas. The design and structure of the circulation network and the dimensions of streets and sidewalks are critical to creating pedestrian character. Vehicular circulation and access to a commercial/retail area and parking must be convenient without negatively impacting the pedestrian quality of the area.

An appropriate street width is essential to the pedestrian environment. If the streets are too wide, traffic will flow too quickly and will be a deterrent to pedestrian movement. To ensure the narrowest possible streets, coordination between the developer and local fire department early in the design process is important.

The ability to close off streets for activities such as farmers' markets, movie nights, and town festivals is important to the success of the developments.

This must be considered during the street and parking design process so that street closures do not hinder vehicular movement or access to parking.

- Visibility of retail is a key design feature. The visibility of a development's retail establishments is essential to promoting the development. Situating a portion of the development's retail so that it is visible from a major roadway provides exposure to people who are unfamiliar with it. This does not suggest creating strip development, but planning a retail street to extend perpendicularly to primary arterials as a "gateway" into the development. Arranging pedestrian circulation between the parking facilities and the transit station through the retail area and public space is a key visibility design element.
- Appropriate residential densities and mixtures are important. Higher residential density does not necessarily make a project more successful. Creating fewer for-sale units and making them more exclusive can increase the sale prices. Lower construction costs of medium-density projects, along with higher per-square-foot sale prices, can make moderatedensity developments more feasible than higher-density developments.

An understanding of the residential market is critical. The higher-density areas often have a demographic of fewer people per household; thus, the availability of smaller units at lower cost and sale price is often important. It is also important to have a range of product types so that absorption of units is maximized. In urban areas, I-plus and 2-bedroom units are often a greater share of the market, as opposed to the 3- or 4-bedroom units applicable to suburban transit-supportive developments.

Some areas can support high-end condominiums or small-lot single-family houses. Other areas, perhaps due to less desirable locations/views or adjacency to a university, are more successful with rental apartments. There is no one-size-fits-all solution. An appropriate market evaluation is critical for the housing and retail programs.

Timing the market is important, since the time it takes to gain approvals and construct the development may extend past the optimum market. It is important to evaluate alternative residential development strategies and have a fallback if needed, such as converting condominiums to rentals.

• Placemaking is an essential part of transit-supportive

developments. Successful transit-supportive developments create places that become destinations in and of themselves and draw people from outside the development. This is accomplished through a variety of placemaking features. The public realm, streets, plazas, or squares are important design elements that, if handled well, will contribute to the overall character and success of the community in the market place. The overall quality of the public realm, such as the design of paving, lighting, seating, and other

elements, can help to create a lively and well-used pedestrian environment, a fundamental goal of transit-supportive development. Buildings need to be sited to reinforce the public spaces and provide active relationships among retail, open spaces, transit, and housing.

• Construction should be advanced with a mixture of uses in the first phase. Some developers assert that a linchpin to project success is construction of the development in one phase. While this may be an ideal situation, it may not be realistic. A possible solution is the construction of a mix of all of the pieces—retail, residential, office—during the first phase. This may mean a large upfront cost for the developer, for both the buildings and the infrastructure. The situation calls for public/private partnerships and agreed-upon phasing.

Conclusions

The 25 transit-supportive developments included in this study contain fully- or near fully-leased retail, office space, and rental apartments and sold or nearlysold homes. Many of these developments currently command above-market rates, and a substantial number of them have generated additional projects nearby, hoping to capitalize on their success and built-in residential density. The success has led to increased property values and, consequently, increased funds for municipalities.

The transit-supportive developments included in this study have achieved success in several ways, but the most common elements of this success are:

- Smaller unit and lot sizes, which increase density and shorten walking distances
- Wide and inviting sidewalks to encourage people to get out of their cars
- Local-serving retail shops that draw residents and patrons from surrounding neighborhoods
- Inclusion of a recognized public place—an area for outdoor movies, farmers' markets, community festivals, and community interaction
- A development center void of automobiles and dedicated to pedestrians and community-building activities
- Support of the local jurisdiction
- Public/private partnerships

Once constructed, transit-supportive developments often command higher rents/sale prices than surrounding properties, with the value decreasing in proportion to the distance from the station. It is not unusual to see properties closer to transit valued at 8–30 percent higher than non-transit adjacent properties (Renne 2009). However, because of their complexity and mix of uses, these developments may take five years or more to become profitable (Utter 2009). The developer must be able to front the higher initial design and construction costs, which are spread over a longer time period than standard

development, before the development becomes profitable. The more a public entity can help, either through financial assistance or early planning, the more money the developer can put into the size and amenities of the project. Because time is critical, developers will shop around for jurisdictions that are experienced in transit-supportive developments, have appropriate zoning in place, or are willing to help expedite the process. Jurisdictions that offer gap funding to help make a project feasible are more attractive to developers.

The presence of a transit station near a development often makes higher densities possible, since people have less reliance on their cars, forgo a second car, and can use transit for daily commuting and shopping. While developments near transit can often support higher densities than the typical suburban residential development, the basic tenets of development still hold true for transit-supportive developments. The developer must research the market and build for the local market. There is no one-size-fits-all formula for a successful transit-supportive development.

Ultimately, for a transit-supportive development to succeed, stakeholders in the process must feel that their concerns and needs were addressed. State and regional governments want to reduce sprawl, traffic congestion, and auto dependence while improving air quality and other environmental conditions. Transit agencies want increased ridership and the possibility of value capture through joint development. Local governments and communities want economic revitalization, a reduced ecological footprint, and developments that positively impact the community. Finally, private developers want a decent rate of return and profit (Renne 2009). A successful transit-supportive development satisfies all of these requirements.

References

- Renne, J. 2009. "Measuring the success of transit-oriented development." In C. Curtis, J. Renne, and L. Bertolini, Transit-Oriented Development: Making It Happen. Ashgate Publishing Company.
- Utter, M. 2009. "Developing TOD in America: The private sector view." In C. Curtis, J. Renne, and L. Bertolini, Transit-Oriented Development: Making It Happen. Ashgate Publishing Company.

B. Case Studies in StationNeighborhood Planning forTransit-Supportive Development

Prepared by: New Jersey Institute of Technology



This section focuses on specific transit station neighborhoods. The station neighborhoods in this section correspond to the transit lines featured in the "Case Studies in Corridor Planning" section. These case studies do not focus on the design of the transit stations, but on the neighborhoods that surround the stations. Just as there is no single method of integrating transit planning and local land use planning on the corridor level, there is also no single planning method on the local level. Like the case studies in corridor planning, each station neighborhood has its own unique story.

The following case studies provide a reference for any entity or community embarking on station neighborhood planning. These examples:

- Discuss laws, regulations, and polices that can be created and implemented to encourage transit-supportive development around transit stations
- Illustrate the types of plans that can be created to support mixed uses and higher densities and address issues such as parking
- Provide the steps that the public sector can take to encourage and enable transit-supportive developments, including how to fund portions of the development, construct the needed infrastructure (such as new streets, sidewalks, and parking structures), and locate civic uses within the development
- Highlight the role of local stakeholders such as community organizations
- Feature real-world examples of transit-supportive developments constructed within the station neighborhoods
- · Provide lessons learned that are transferrable to other local jurisdictions

The case studies are not intended to reflect all situations, but are meant to be illustrative of various experiences. Not all of the planning approaches discussed at the station neighborhood level can be replicated since communities are unique entities, but there is much to be learned by reviewing what others have done and how they have done it.

The station neighborhood case studies included in this section are as follows:

- Hayward Station, BART Richmond-Fremont Line, City of Hayward, CA (heavy rail/rapid rail)
- Plano Station, DART Red Line, City of Plano, TX (light rail)
- Del Mar Station, Gold Line, Pasadena, CA (light rail)
- Pearl District, Portland Streetcar Line, Portland, OR (streetcar)
- Orenco Station, Westside MAX Blue Line, Portland, OR (light rail)

Hayward Station, BART Richmond-Fremont Line, City of Hayward, CA

Prepared by: New Jersey Institute of Technology Van Meter, Williams, Pollack, LLP

A previous section of this Guide focuses on the BART Richmond-Fremont Line and its associated planning for transit-supportive development. This section focuses on one station neighborhood along the Richmond-Fremont Line and the specific planning and policies enacted to encourage and enable transit-supportive developments. Highlights of specific transit-supportive developments are also provided.

Case Facts		
System Name:	Hayward	
Station Location:	Hayward, California	
Transit System Name:	BART	
Transit Corridor Name:	Richmond-Freemont Line	
Transit Mode:	Heavy rail	
Region (USA):	West	
Role of Station within Corridor:	Commuter	
Station Typology:	Transit Town Center	
Municipal Characteristics:		
Location	25 miles southeast of San Francisco	
Size	62.55 square miles	
Population	145,839 residents (as of January 1, 2011)	

Overview of BART's Richmond-Fremont Line

The Richmond-Fremont Line is within the Bay Area Rapid Transit (BART) heavy rail (rapid transit) system. The line runs for 34.4 miles from Richmond to Fremont. Constructed in two separate stages—the A line from Fremont to Lake Merritt (23.8 miles) and the R line from Richmond to MacArthur (10.6 miles)—the line has 18 stations serving 8 communities (see Figure 5B-I). Additionally, the AirBart shuttle connects the Richmond-Fremont line to Oakland International Airport.



Source: http://www.bart.gov/stations/index.aspx and Van Meter Williams Pollack, LLP

Hayward Station Neighborhood

The Hayward Station is contained within the city of Hayward, California. The city of Hayward is in Alameda County and lies 25 miles southeast of San Francisco, 14 miles south of Oakland, and 26 miles north of San Jose. The Hayward Station is located toward the southern end of the Richmond-Fremont Line. One of two Richmond-Fremont Line stations located within the city, Hayward Station enjoys a downtown location and has benefitted from public investments, including a new City Hall and extended promenade and plaza designed to make the station an extension of the community. Hayward Station is a commuter station for city residents and, using the Center for Transit-Oriented Development's (CTOD's) "Transit-Oriented Places Typologies," would best fit into the "Transit Town Center" category, characterized as a local center for economic and community activity that includes a mix of moderate-density residential, commercial, employment, and civic uses. Transit in this neighborhood type is primarily commuter service to jobs.

The Hayward Station neighborhood, as defined for this case study, includes approximately 170 acres of land east and west of the Hayward BART Station within an approximate ¹/₄-mile radius of the station. The boundaries include Mission Boulevard to the east and Alice Street to the west. The northern boundary, one block north of A Street, is Grace Street (east of BART) and Smalley Street (west of BART). The southern boundary starts at the intersection of Mission Boulevard and Jackson Street and follows Jackson Street diagonally and southerly to Sutro Street, then travels north to Dean Street, which runs west to meet with Alice Street, the western boundary (see Figure 5B-2). (See chart at the end of this section for data pertaining to the Hayward Station and its associated neighborhood.)



Source: Van Meter Williams Pollack, LLP



Figure 5B-2

The neighborhood includes a healthy mix of land uses, including retail, residential, and civic buildings. The City Hall (opened in 1998), along with new retail establishments, contribute to the "city center" dynamic, while new residential projects are helping to enliven the downtown core. Neighborhood building heights are modest, ranging from 1–3 stories. Residential densities vary from 5 dwelling units per acre (du/acre) for single-family blocks to 35 du/acre for new multifamily housing blocks.

Planning for Transit-Supportive Development

The City of Hayward has long encouraged transit-supportive development. The downtown Hayward Station neighborhood has experienced considerable success anchored by public investments. A Downtown Hayward Design Plan was adopted in 1987 and has since been revised three times, most recently in 1992. The plan set forth a vision for the area and set a tone for other supportive actions taken by the City of Hayward. The General Plan, zoning ordinances, and Downtown Hayward Redevelopment Plans have all strongly encouraged transit-supportive development. The Central City Residential Zoning District, which encompasses land to the north and west of the study area, allows residential densities of 17–108 du/acre (see Figure 5B-3).



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Figure 5B-3 Downtown Hayward

> Design Plan, Densities Map

Source: City of Hayward, http://www.hayward-ca.gov/municipal/ZoningOrd/sec%2010-1.1540%20central%20city%20plaza.pdf

As a practical matter, most of the key projects and area-wide improvements have resulted from public/private partnerships, many involving the Hayward Redevelopment Agency. From a regulatory standpoint, these improvements were encouraged by the Planned Development District (PD) guidelines. The City of Hayward's emphasis has been on initiating projects, as opposed to achieving specific density targets. Most of the transit-supportive development projects constructed range from 20–30 du/acre. The catalyst City Hall project was accomplished with assistance from BART, which participated in both a land swap and a property sale, making it possible to construct the project and develop the pedestrian connection that effectively made the Hayward Station a part of the community.

The City of Hayward has used the Hayward Redevelopment Agency and TIF to develop public/private projects and to help finance public improvements. (For more information on TIF, see the "Funding and Financing Public Transit and Transit-Supportive Development" section.) The city government has also used a series of programs to improve the downtown area, including the Sidewalk Rehabilitation Program, the Clean and Safe Activities Program, and the Retail Attraction Program, which makes loans to both property owners and businesses. A Business Improvement District (BID) and a Community Development Block Grant provide funding to maintain the area.

The City of Hayward Redevelopment Project Area includes three redevelopment sub-areas—Redevelopment Sub-Area I (Downtown Redevelopment Area and 1987 Annex), Redevelopment Sub-Area 2 (Burbank-Cannery Sub-Area), and Redevelopment Sub-Area 3 (Mission-Foothill Sub-Area), (see Figure 5B-4). The Hayward Station Neighborhood is contained within in Redevelopment Sub-Area I.





Source: http://www.hayward-ca.gov/departments/ced/documents/redevelopment/RedevelopmentProjectAreaMap.pdf

Hayward Station Neighborhood's Transit-Supportive Developments

The City of Hayward is an established community with existing transitsupportive development infrastructure, including a connective street grid and suitable block sizes. The effort to encourage transit-supportive development has included many separate factors. Within the Hayward Station neighborhood is the Downtown Redevelopment Area. The 1987 Annex transit-supportive development projects within this Redevelopment Sub-Area are the subject of the following discussion. Figure 5B-5 illustrates the areas of change within the neighborhood and the specific transit-supportive developments.



Source: Van Meter Williams Pollack, LLP

Figure 5B-5

Areas of Change and Transit-Supportive Developments in the Hayward Station Neighborhood

Redevelopment Sub-Area 1: Downtown Redevelopment Area and 1987 Annex

The Original Redevelopment Area and 1987 Annex comprise Redevelopment Sub-Area I. In response to people moving away from the city center, this 240acre area was established to revitalize the downtown core and create a civic presence within the downtown. The focus has been on attracting and keeping small businesses in downtown, concentrating retail and residential uses more centrally, and providing parking and infrastructure upgrades.

Albertson's Center

Located between A and B Streets along Mission Boulevard is the 62,000 SF Lucky Supermarket (formerly Albertson's). Also on this block is 18,000 SF of smaller retailers and surface parking. The presence of the large supermarket is masked by small, liner retailers along B Street, which helps to contribute to the pleasant pedestrian experience of B Street. Additional parking is provided atop the supermarket, accessed by a ramp adjacent to B Street.

This project was a six-year public/private effort between the Hayward Redevelopment Agency and Albertston's. The agency provided environmental assessments of the site, assembled the land, and then sold the land to the developer at market rate (see Figure 5B-6).





Source: Van Meter Williams Pollack, LLP

B Street Marketplace and Public Parking Structure

Located across B Street from Albertson's Center is the B Street Marketplace, which includes approximately 15,000 SF of ground-floor retail for small tenants. Tenant improvements, funded by the Hayward Redevelopment Agency, were completed by 2002, which helped extend the commercial corridor of B Street closer to the Hayward Station and the City Hall. A public parking structure, located adjacent to the B Street Marketplace, is the result of a joint effort between the City of Hayward and the Hayward Redevelopment Agency. Originally constructed in 1999, the parking structure included 320 parking spaces on two levels. In 2005, the B Street Marketplace was subdivided and sold to a private owner for \$3.65M. Revenue of \$3.5M was used to add another level of parking to the structure with 178 parking spaces, for a total of 498 available spaces. This parking structure serves the B Street Marketplace, nearby merchants, and City Hall visitors and employees.

Hayward City Hall

The Hayward City Hall (see Figure 5B-7), opened in 1998, is the focal point of the Hayward Station neighborhood. This catalyst project includes a public pedestrian "paseo," which connects directly to the BART station, as well as a public park and plaza. The building offers a public rotunda and art gallery featuring local artists, as well as a public information center on the first floor. The plaza surrounding City Hall is used for Downtown street parties, held on the third Thursday of each month from June to September. The street parties are hosted by the Hayward Chamber of Commerce and include local merchant booths, community and civic organizations, food vendors, activities for families, and live music. This civic icon has helped spur other development in the neighborhood and has helped to extend the "city center" toward the Hayward Station.




Source: Van Meter Williams Pollack, LLP

The land for the City Hall redevelopment was made available through a land swap with BART. The City owned two parcels north and south of Atherton Street, and BART owned the portion closest to the transit station. To implement the city's vision for City Hall, BART exchanged land with the local government. The City took the western half of the block, and BART took the eastern half (where the City Walk development currently sits). BART also sold to the City, at fair market value, an 8,214 SF parcel for the pedestrian promenade linking City Hall to the Hayward Station. The City obtained a \$1.1M Intermodal Surface Transportation Efficiency Act (ISTEA) grant to build the pedestrian promenade, which was similar to the grant BART won for the Fruitvale Station.

Funding for the City Hall project and the addition to the parking structure (mentioned above) was provided through funds borrowed from the City. The \$7.5M borrowed was repaid at \$800,000 per year. The secured funds were used for land acquisition, site costs, development of the civic plaza, and the parking structure addition.

City Walk Townhomes

City Walk Townhomes are located on the same block as Hayward City Hall. This project was completed in 2003 and includes 77 residential units in 2- and 3-story buildings at 22 units per acre. Parking is provided individually per unit in tuckunder garages. This project was a public/private partnership between the Olson Company, the Hayward Redevelopment Agency, and BART. The agency's cost toward the project was \$3.M, which covered the land assembly, street closures, and site clearance. The Hayward Redevelopment Agency acquired the land from BART (see previous land swap for City Hall) by purchasing and swapping a county parcel at A and Montgomery streets. The land was sold to the developer for approximately \$2M. This project has helped to populate downtown with higher-density housing (see Figure 5B-8).



Source: Van Meter Williams Pollack, LLP

Renaissance Walk

Renaissance Walk, completed in the summer of 2005, is located on Watkins Street between C and D streets. This 46-unit condominium development, at 24 units per acre, consists of four-plex, tri-plex, and duplex units on one block. Twenty-two of the units are priced for affordable- to moderate-income homebuyers. Affordable units were made possible through a public/private partnership with the Olson Company and Hayward Redevelopment Agency. The agency assembled, cleared, and environmentally-remediated the land for \$4.8M, and then sold the land to the developer for \$2M, enabling the developer to build affordable units. The loan from the Hayward Redevelopment Agency was repaid in full, in installments, as each unit was sold (see Figure 5B-9).

Figure 5B-9

Renaissance Walk



Source: Van Meter Williams Pollack, LLP

Studio Walk

Studio Walk, located on the corner of Atherton and D streets, was developed by Ryland Homes and completed in 2005. At 35 units per acre, this condominium project consists of 70 loft units in 3-story buildings. Two-story ground floor units and three-story flats are available. Parking is provided on-site with tuck-under garages (see Figure 5B-10).

Figure 5B-10

Studio Walk



Source: Van Meter Williams Pollack, LLP

Atherton Place Townhomes

Constructed in 1997, this 83-unit townhome project is bounded by C, D, and Atherton Streets (see Figure 5B-11). It is the result of a successful public/private effort between the Hayward Redevelopment Agency and the Sares-Regis Group. Adjacent to the BART Station and downtown Hayward, this project represents the agency's first effort to introduce new housing to the downtown core.

Figure 5B-11 Atherton Place Townhouses



Source: City of Hayward Development Services

Redevelopment Sub-Area 2: Burbank-Cannery Sub-Area

The Burbank Cannery Area is one of the largest redevelopment areas (370 acres) undergoing significant change. It is partially included in the western edge of the Hayward Station neighborhood study area and is less than ³/₄ mile from the station. This former Hunt-Wesson Cannery industrial site will be transformed over time into a desirable urban neighborhood with connected streets, parks, a

school, and residential and commercial uses. The master plan proposes adding up to 950 dwelling units, 250,000 SF of commercial space, a 25,000 SF community center, a new elementary school, and 29 acres of public open space and parks. The new Burbank Elementary School and Cannery Park have been completed, but residential development has been slow to follow due to the current real estate market conditions. The design concept is shown in Figure 5B-12.

Design Concept



Hayward Cannery Area Design Concept | Hayward, California

Solomon E.T.C. Architecture & Urban Design 10



Figure 5B-12 Hayward Cannery Area Design Concept

Eden Housing

Located adjacent to Hayward Station, at the corner of C and Grand streets, is the 60-unit Eden Housing project. Completed in 2008, this rental project is restricted to low-income older adults and also serves as the new administrative headquarters for Eden Housing, Inc. This public/private partnership between the developer and Hayward Redevelopment Agency included a \$507,000 loan from the agency's Low and Moderate Income Housing fund.

Another 22-unit, low- to moderate-income older adult housing project is currently being developed next to the Eden Housing project at B and Grand Streets. Eden Housing, Inc., is also developing this site with land donated by the City of Hayward under the Cannery Inclusionary Housing Agreement (see Figure 5B-13).



Figure 5B-13

Eden Housing

Source: Van Meter Williams Pollack, LLP

Grand Terrace Townhomes

Located on the corner of D and Grand streets are the Grand Terrace Townhomes, the largest residential redevelopment project to be built in the Burbank-Cannery Sub-Area to date. Developed by Pulte Homes, this project includes 235 units completed in two phases. The first phase, completed in June 2004, included 161 units. The second phase, completed in December 2004, consisted of 74 units. At a net density of 35 du/acre, this development is one of the densest developments in the neighborhood (see Figure 5B-14). Figure 5B-14 Grand Terrace Townhomes



Source: Van Meter Williams Pollack, LLP

Pinnacle City Centre

This 192-unit rental condominium development located at the corner of C and Grand streets was completed in 1999 (see Figure 5B-15). It is located adjacent to the Hayward BART Station and within walking distance of downtown.





Source: City of Hayward Development Services

Redevelopment Sub-Area 3: Mission-Foothill Sub-Area

While beyond the Hayward Station Neighborhood study area, the Mission-Foothill Sub-Area is worthy of mention. As seen in Figure 5B-4, this redevelopment sub-area is a corridor extending from north of downtown Hayward to the South Hayward BART Station. The corridor is the newest redevelopment area and includes multiple plans for redevelopment although implementation has been slow. The South Hayward BART/Mission Boulevard Form-Based Code is anticipated to be adopted in 2011, replacing the Concept Design Plan. It will guide new development surrounding the South Hayward Station area. A Corridor Specific Plan for Mission Boulevard, which will entail a form-based code, is also underway and should help guide development and revitalization along the corridor.

Lessons Learned

It is never too late to capitalize on redevelopment opportunities near transit stations. The Hayward Station has been a work-in-progress for many years. Redevelopment takes time and consistent effort. The City of Hayward has made continuous efforts toward a more vibrant downtown. Changing economies and longstanding property owners not presently interested in development/ redevelopment have had a major impact on timetables. The City of Hayward's longstanding commitment to change and willingness to invest public funds have ultimately made the difference.

Public agency collaboration is critical. A shared vision and a land swap between the City of Hayward and BART made it possible to extend the benefits of the new City Hall to the wider neighborhood.

Plans must be flexible. The City of Hayward has a station area density goal and has taken a practical approach toward achieving it. In negotiations with developers, the city has been able to realize densities that, while lower than those permitted, are higher than had previously existed in the station area. The city has also shown a willingness to change its plans to realize its goals. In the South Hayward Station Area, this has led to the development of a new formbased code.

References

- Bay Area Rapid Transit. 2010. "BART transit-oriented development program: BART property development." Retrieved from bart.gov/docs/BART_ TOD_121510.pdf.
- Bay Area Rapid Transit. "Hayward Station overview." Retrieved from http:// www.bart.gov/stations/hayw/index.aspx.
- City of Hayward. 2005. "Implementation plan for the Hayward redevelopment project area FY 2004–05, FY 2008-09." Retrieved from www.ci.hayward. ca.us/citygov/meetings/cca/rp/2005/rp120605-07.pdf.
- City of Hayward. 2010. "Implementation plan for the Hayward redevelopment project area FY 2010–FY 2014." Retrieved from http://www.hayward-ca.gov/ departments/citymanager/documents/2010/ Combined_ Implementation_ Plan_2010-2014.pdf.

- City of Hayward. "Zoning ordinance: Planned development district PD Section 10-1-2500." Retrieved from http://www.ci.hayward.ca.us/municipal/ ZoningOrd/ sec%2010-1.2500%20planned%20development.pdf.
- City of Hayward Redevelopment Agency. 1992. "Downtown Hayward design plan."
- McLaughlin, J., Housing Manager, City of Hayward. 2011. Personal interview.
- Ordway, J., Manager of Property Development, BART. 2011. Personal interview.
- Rizk, D., Director of Development Services, City of Hayward. 2011. Personal interviews.
- Reconnecting America and Center for Transit-Oriented Development. "TOD 202: Station area planning: How to make great transit-oriented places." Retrieved from http://www.reconnectingamerica.org/public/show/tod202.
- Solomon E.T.C. Architecture & Urban Design. "Hayward cannery area design concept." Retrieved from http://www.hayward-ca.gov/departments/ced/ documents/redevelopment/haywardredevelopmentagency/Cannery%20 Area%20Plan/Cannery%20Area%20Study.pdf.

Hayward Station Neighborhood Data

Transit Operator Bay Area Rapid Transit

Transit System Name BART

Transit Corridor Name Richmond-Fremont Line

Transit Mode Heavy Rail (HR)

Location (Metro Area) San Francisco, CA

Region (USA) West

Station Name Hayward Station

Station Location Hayward, CA

Station Typology* Transit Town Center

Role of Station within Corridor Commuter

Defined Neighborhood Size Approximately 1/4 mile from station

Land Use Description Hayward Station Neighborhood includes a rich mix of town center uses such as civic, entertainment, retail, office and residential. New multi-family residential and retail projects are being planned and built at a rapid pace, including the Cannery Area—120 acres of transforming industrial land into urban housing.

Redevelopment Plan/Special Zoning City of Hayward Design Guidelines (1993); Downtown Hayward Design Plan (1992); The Core Area Plan (1992); Downtown Hayward Redevelopment Plan (1992). Zoned CC-C and CC-R (City Center special zoning)

Land Use Standards that Encourage TSD

Governing Document Downtown Hayward Design Plan

Densities 17 - 85 DU/AC

Building Heights 42' (on B Street between Watkins and Foothill Blvd.) and 55' elsewhere

Floor Area Ratios limited by max. building heights and design principles

Parking Requirements Commercial: I per 315 SF, except for theaters (I per 4 seats) Residential: I covered and 0.5 open spaces per dwelling unit (may be reduced to I space per DU minimum in Downtown Core provided the aggregate parking supply at buildout is 1.5 per DU); 0.5 per unit for senior housing

Encouraged Land Use Mix Residential and mixed-use Residential

Station Placemaking Features New City Hall with pedestrian promenade and public plaza and park

Significant Transit Supportive Development

I. Albertson's Center (22555 Mission Blvd.) 62,000 SF Albertson's supermarket (now Lucky) with parking atop building and surface parking, plus 18,000 SF of retail space along B Street and at the corner of A Street and Mission Blvd. Total site is approximately 5 acres. Public/private partnership between Albertson's and Hayward Redevelopment Agency.

2. B Street Marketplace/Parking Structure (805-895 B Street) 2-level parking structure (320 stalls) and B Street Marketplace (15,000 SF retail) completed in 1999 on approximately 1.7 acres. In 2005, a 3rd level was added to the parking structure (total 498 stalls) and retail center sold to private owner.

3. Hayward City Hall (777 B Street) Civic building including a plaza and pedestrian "paseo" connecting to the Hayward BART Station on 2.2 acres.

4. City Walk Townhomes (Intersection of Watkins Street and C Street) 77 residential units on 3.5 acres adjacent to BART station and City Hall. Project was a public/private partnership between Olson Company and Hayward Redevelopment Agency.

5. **Renaissance Walk (Watkins Street/Atherton Street between C and D Streets)** 46 residential units on 2 acres built in four-plex, tri-plex and duplex typologies (22 units were priced affordable to moderate-income and deed restricted). The Agency assembled, cleared and remediated the 17 parcel property and wrote the land cost for the developer, enabling the developer to build affordable units.

6. Studio Walk (Intersection of Atherton Street and D Street) 3-story privately developed building complex with 70 residential units (2-story ground floor units with flats above) on approximately 2.8 acres. Parking is available in tuck-under and on-site parking areas.

7. **C** and Grand Street (Intersection of **C** and Grand Streets) Eden Housing inclusionary housing project with assistance from Hayward Redevelopment Agency. Project includes 60 affordable residential units for seniors on 1.3 acres.

8. Grand Terrace Townhomes (Intersection of Grand and D Streets) 235 privately developed townhomes on approximately 6.7 acres built in two phases.

9. Atherton Place Townhouses 83-unit townhome project is bounded by C, D and Atherton Streets. It is the result of a successful public/private effort between the Hayward Redevelopment Agency and the Sares-Regis Group. Adjacent to the BART Station and downtown Hayward, this project represents the Agency's first effort to introduce new housing to the downtown core.

10. Pinnacle City Centre 192-unit rental condominium development located at the corner of C Street and Grand Street was completed in 1999. It is located adjacent to the Hayward BART Station and within walking distance of downtown.

NOTES: * From CTOD's Station Area Planning: How to Make Great Transit-Oriented Place

Plano Station, DART Red Line, Plano, TX

Prepared by: New Jersey Institute of Technology Van Meter, Williams, Pollack, LLP

In the Guide, a case study focuses on the DART Red Line light rail and the regional planning efforts undertaken to integrate transit planning with local land use planning. This section focuses on one neighborhood along DART's Red Line and the specific planning and policies enacted to encourage and enable transit-supportive development. Planning and reinvestment in the downtown core has a long history in the City of Plano and the development of the Red Line provided the city with a unique opportunity to add a key attraction to an existing vision, and see outstanding results. The downtown area is frequently referred to as a transit village success story, which has proven difficult to achieve in many suburban communities. Also in this section are highlights of specific transit-supportive developments.

Case Facts		
Station Name:	Downtown Plano	
Station Location:	Dallas, Texas	
Transit System Name:	DART	
Transit Corridor Name:	Red Line	
Transit Mode:	Light rail	
Region (USA):	South	
Role of Station within Corridor:	Destination and commuter	
Station Typology:	Transit Town Center	
Municipal Characteristics:		
Location	Dallas	
Size	385.8 square miles	
Population	1,197,816 residents (as of 2010 Census)	

Overview of the DART Red Line

The Dallas Area Rapid Transit (DART) system was created in 1983 with the passage of a one percent sales tax. The Red Line, which runs from Westmoreland Station in Southwest Dallas to Parker Road Station in Plano, was the first light rail line constructed by DART, with service starting on the Dallas portion of the system in 1996 and subsequent links to Richardson and Plano in 2002 (see Figure 5B-16). The corridor is approximately 30 miles long and has 25 stations within the 3 cities served.

The Red Line was the "starter" line in the Dallas region and a link in a light rail system that now contains 72 miles of track, with an expected expansion to more than 90 miles by 2013. The first segment of the Red Line, contained within the city of Dallas, was opened in 1996. It was followed by extensions to the City of Richardson (Galatyn Park Station) and to the City of Plano (Parker Road Station) in 2002. The region experienced some excellent early planning that considered land use and transit together, particularly at the local community level. Specifically, the cities of Richardson and Plano realized the potential of transit to augment planning efforts already underway and took steps to maximize that potential.



Source: http://www.dart.org/about/expansion/expansionmaps.asp and Van Meter, Williams, Pollack, LLP

Figure 5B-16 DART Red Line

Downtown Plano Station

The Downtown Plano Station is in the city's historic core. The station's location was chosen following studies and planning discussions between the city government and DART. The Downtown Plano Station is less than one block from 15th Street, which has always served as Plano's "Main Street." The Downtown Plano Station is located between two major park-and-ride stations (Bush Turnpike to the south and Parker Road to the north). By virtue of its location, the station has served primarily a resident commuter function, but the growing development success of the station area is helping to make it a destination station.

Red Line service to Dallas takes approximately 35 minutes. Local planners now emphasize that the Red Line has changed spatial patterns and that increasingly it serves as a linear connector between the developing transit destinations. The Downtown Plano Station's daily ridership of 1,116 exceeds the original projections.

CTOD defines the Downtown Plano Station's typology as a "Transit Town Center," which is characterized as a local center of economic and community activity with a moderate-density mix of residential, commercial, employment, civic, and cultural uses. The foundation for this mix of uses was built over several years by a city that made the decision, and the necessary investments, to keep its downtown vital. (See chart at the end of this section for data pertaining to the Plano Station and its neighborhood).

Downtown Plano Station Neighborhood

For the purposes of this case study, the Downtown Plano Station neighborhood has been defined as an area of approximately 170 acres within approximately 1/4 mile, or a 5-minute walk, from the station. The boundaries include 18th Street to the north, M Avenue to the east, 13th Street to the south, and F Avenue to the west (see Figure 5B-17).



DOWNTOWN PLANO STATION NEIGHBORHOOD • PLANO, TX (DART RED LINE)

Source: Van Meter, Williams, Pollack, LLP

Figure 5B-17 Station Neighborhood Boundary Map

Today, the Downtown Plano Station neighborhood includes a variety of land uses, including retail, a mixture of residential types, an employment center revolving around the substantial municipal complex, and established cultural and performing art centers. It has two large mixed-use projects. Buildings within the area are consistent with the historic core and range from I to 4 stories with densities of 5 units/acre to more than 100 units/acre for newer projects close to the station.

Planning for Transit-Supportive Development

The city of Plano grew up around rail service and became a trading center for an agriculturally rich Collin County because of its access to freight lines. It also had an early connection to Dallas, with rail service provided by the Texas Traction Company (Interurban Electric Service) beginning in 1908. The Interurban right-of-way now accommodates the Red Line light rail service.

As previously noted, the City of Plano has continually planned and invested to accommodate growth and stimulate economic development. The city's commitment to its downtown core has been unwavering. This explains the city's ability to avoid the fate of many older central business centers, which are surrounded by suburban growth and faced with competition from regional malls and big box retailers. In the 1980s, the city government realized that the downtown core was becoming like many other suburban central business areas, a specialty shopping locale with a limited retail base. The City of Plano made a concerted effort to keep the downtown area relevant by building, and then expanding, a new municipal complex. Assisted by citizen support in the form of a bond issue, the local government improved streetscapes, expanded a central city park, and acquired properties that were inconsistent with a revitalized central district.

Building on its commitment to keep Downtown Plano vital, in 1991, the Plano Planning and Zoning Commission prepared a plan to guide future development. The Downtown Plano Development Plan, approved by the City Council in the same year, called for the creation of a mixed-use, compact development using infill and stressing diversification via arts and cultural facilities. A new zoning district called Business/Government was put in place for the 80-acre downtown core area. In reality, many of the factors that have made Downtown Plano stand out as a model Transit Village were in place well in advance of the Red Line. At the time the City of Plano was recommitting to the downtown area, construction of the Red Line was presumed to be many years in the future, and neither the type nor location of the downtown station was certain. By 1995, a full-service stop for the downtown area was assured, but its location was not agreed on until 1998.

Both Plano and Richardson, its neighbor to the south, embraced the anticipated Red Line, viewing it as a way to complement many of the community objectives already in place. In Plano's case, the location of the station was critical, and with DART's assistance a mutually-agreed-upon site complemented and solidified ongoing efforts and investments in the core area. In 1997, the city government conducted a study of alternative sites. The study borrowed a concept from the 1991 development plan to create a downtown center block by closing an avenue and acquiring heavy commercial, auto-related uses for additional space. The 3.6-acre site was sufficient to accommodate the station and also provide land for future development. The city government and DART agreed on the location in April 1998. In September of that year, the city government approved a redevelopment concept calling for high-density, mixed-use development immediately adjacent to the station. Using an interlocal agreement, DART agreed to purchase property and transfer any surplus to the City of Plano in exchange for infrastructure improvements.

By 1999, the City of Plano, through a Request for Proposal (RFP) process, selected a developer and created a plan for the station area. The City also continued to work on a larger vision for the Downtown area, and in May 1999 adopted Downtown Plano: A Vision and Strategy for Creating a Transit Village. The plan established goals for both retail and residential development within the ¹/₄-mile radius of the station and offered a set of design guidelines to help create the type of livable, walkable community the vision imagined. The existing Business/ Government (BG) Zoning District stayed in place, but adjustments permitted densities to increase from 40–100 units/acre. This zoning district, which has clearly withstood the test of time, was extended in 2003 to include an additional 30 acres and includes most of the study area discussed in this section (see Figure 5B-18).

Figure 5B-18

Plano Business/ Government Zoning District



Source: City of Plano Planning Department

In 1999, the City of Plano established a TIF District, which under Texas law can be broader geographically than many other jurisdictions across the nation. The Eastside TIF is linear in nature and follows the Red Line Corridor for the entire length of the city. The city government uses the TIF district as an economic development tool for the entire city. The Plano Regional School District, the Collin County Community College, Collin County, and the City of Plano are all part of the district. The appraised value of properties within the district grew by more than \$100M from 1999 to 2009, and revenue generated by the increase is expected to exceed \$20M by 2014. Funds have been used to purchase property, fund infrastructure improvements, and encourage public/private developments, such as the Plano Courtyard Theater. (For more information on TIFs, see "Funding and Financing Public Transit and Transit-Supportive Development.")

Downtown Plano Station Neighborhood's Transit-Supportive Developments

Having engaged in proactive planning prior to the arrival of the Red Line, the City of Plano was in an excellent position to capitalize on the development potential transit provided. By 1999, the city government had undergone an RFP process, selected a developer, agreed on a development plan, and amended the Business/ Government (B/G) zoning district to permit higher densities. The station area was poised for new development (see Figure 5B-19).



DOWNTOWN PLANO STATION NEIGHBORHOOD • PLANO, TX (DART RED LINE)

<u>- 300' 600'</u>

Source: Van Meter, Williams, Pollack, LLP

Figure 5B-19 Significant Transit-Supportive Developments

Following is a discussion of a several of the transit-supportive developments contained within the Downtown Plan Station neighborhood.

Eastside Village I

The first major transit-supportive development in the Downtown Plano Station area was Eastside Village I, a project consisting of 234 residential units and 15,000 SF of retail space. The project, built by Amicus Partners, is a true public/ private partnership. The property is leased to the developer on a 70-year ground lease with three 10-year extensions. The Plano city government funded all off-site infrastructure and streetscape improvements with \$1.3M of the \$2M cost credited by DART against the value of land transferred by the city for the station. Eastside Village I was completed in December 2001 and fully occupied by June of 2002 (see Figures 5B-20 and 5B-21).

Figure 5B-20

Eastside Village I, DART Platform



Source: City of Plano Planning Department

Figure 5B-21

Eastside Village I



Source: City of Plano Planning Department

Eastside Village II

In January 2001, the City of Plano and Amicus Partners agreed to undertake a second infill project, Eastside Village II, on a site of approximately 3 acres, 400 feet south of Eastside Village I. The city government owned 1.1 acres of the property as a result of two separate purchases, one of which dated back to 1983. When an adjacent 2.2-acre parcel became available, Amicus Partners acquired it, and the successful public/private partnership continued. After the developer engaged the community in the planning phase, the City Council approved a preliminary development plan in March 2001. Eastside Village II was built in a style and scale consistent with Eastside Village I. It consists of 229 residential apartment units (38 efficiencies, 137 one-bedroom, and 54 two-bedroom)

and 25,000 SF of nonresidential space. The project has a parking garage of 416 spaces, 100 of which were granted to the city in exchange for the 1.1-acre site that the city made available for development. The City of Plano also contributed to public infrastructure improvements surrounding the project site (see Figures 5B-22 and 5B-23).

Figure 5B-22 Eastside Village II, 1st

Eastside Village II, 1st Floor Retail



Source: City of Plano Planning Department



Source: City of Plano Planning Department

Eastside Station

Another project in the Downtown Plano Station area is the proposed Eastside Station, located at the Southeast corner of 15th Street and Avenue I (This name may change before the project is completed). The approved plan calls for the development of 230 residential units with 15,000 SF of ground floor commercial

Figure 5B-23

Eastside Village II, Interior Courtyard space, with construction scheduled to commence by January I, 2012. The mixeduse project will occupy a parcel of 3.1 acres, 1/6 of which is owned by the city and will be granted to the developer, Southern/Pinnacle AMS, in exchange for 100 structured parking spaces. As designed, the project will be connected to the DART light rail station via a pedestrian walkway provided by DART on a right-ofway easement.

15th Street Village

Located at the intersection of 15th Street and Avenue G, this project at completion is expected to contain 34 townhomes and 90 condominium units. The original project developer completed 13 of the townhouses and 34 condominiums before losing its financing. New owners expect to complete the project as the economy recovers. The four-acre parcel includes one acre owned by the city, which is being provided at a reduced price.

Lexington Park at Rice Field

Upon completion, this project, located along Avenue G between 16th and 18th Streets, is planned to have 98 luxury townhomes surrounding a new park. Currently, 14 of the townhomes have been completed and new investors are considering a proposal for the remainder of the development. The six-acre site was sold by the city to the developers for a substantially reduced price.

City of Plano's Revitalization Efforts

The major transit-supportive developments in the Downtown Plano Station neighborhood have been important to the ongoing revitalization efforts of the City. The City of Plano's experience offers lessons on how to develop a Transit Village, keeping in mind that there are many parts to the process. Over the years, the city government both planned and invested in its vision. It benefitted from the efforts of groups like the Cultural Arts Council of Plano, a non-profit established in 1981, which purchased and refurbished a former furniture store into a 24,000 SF theater 10 years later. The Courtyard Theater and the Art Centre of Plano both preceded the Red Line, and both helped the city realize the diversity goals established in the 1991 Downtown Plano Development Plan. The Courtyard Theater was a true joint venture, since a significant portion of funding (\$4.6M) came through the TIF District for the \$6.5M theatre (see Figure 5B-24).



Courtyard Theatre



Source: City of Plano Planning Department

Equally important are the individual building-by-building renovation efforts, (see Figures 5B-10 and 5B-11), which have been encouraged by the City of Plano's planning staff and supported by innovative historic tax abatement and fee waiver programs. The Historic Tax Abatement Program is endorsed by all four of the governmental entities with property taxing powers (City of Plano, Collin County, Collin County Community College District, and Plano Independent School District) and allows exemptions ranging from 38–100 percent of a structure's value. The Neighborhood Empowerment Zone, which was adopted in 1999, includes the Downtown Core and surrounding neighborhoods. The zone provides permit fee waivers for the rehabilitation of commercial buildings and single-family housing. The results of the city's commitment and approach are apparent throughout Plano.

Figure 5B-25

Renovated 1013 E. 15th Street

Before



Source: City of Plano Planning Department

After





Renovated 1006 E. 15th Street



Source: City of Plano Planning Department

Lessons Learned

The willingness of the public sector to invest is critical. The City of Plano invested in downtown revitalization well in advance of the implementation of the Red Line and continued to invest after the Red Line was established. Few projects of significance are developed by only the private sector.

Land banking can be a successful strategy. One of the City of Plano's many investments was in land. Well located, land-banking sites have given the city the ability to participate in public/private partnerships, which have made a significant difference.

Transit-supportive investments are long-term investments. It takes years to recover at the fare box, and years for the public and private sectors to realize a return on their investments. The City of Plano began investing in its future in the early 1980s, and continues to invest. Its return on these investments has included the ability to support new economic development with TIF proceeds.

A transit line can create spatial relationships from community to community. As one longtime planner observed, "It's like an elevator. You develop linear relationships with other communities along the line that didn't exist, and there is much more movement back and forth."

Parking is one of the most frequently-noted obstacles to successful transit-supportive development. Surface lots are rarely compatible with mixed-use development and structured parking is expensive. The public sector typically has to participate in the development of structured parking.

Even with excellent planning in place, development is ultimately the result of a negotiated process. Plans, regulations, and visions set the stage, but each development brings its own challenges and needs. If the regulations are broad and flexible, as Plano's Business/Government zone has proved to be, projects can be accommodated with minor adjustments.

TIF can be a key tool for financing. The Texas legislation permitting TIF districts is broader than most and allows the establishment of linear districts that make it possible to spread the benefits. Each of the communities along the Red Line has taken advantage of linear TIFs within their own boundaries.

References

- City of Plano, Texas. "Comprehensive plan, mixed-use policy statement Section 5.0." Retrieved from http://www.plano.gov/Departments/Planning/zoningl anddevelopment/ Pages/default.
- City of Plano, Texas. 1999. "Downtown Plano: A vision and strategy for creating a transit village." Retrieved from http://www.plano.gov/Departments/ Planning/ Pages/Planning.aspx.
- City of Plano, Texas, Transition and Revitalization Commission. 2008. "Future dimensions, envisioning Plano's future." Retrieved from http://pdf.plano.gov/planning/Planning%20Documents/FutureDimensions.pdf.
- City of Plano, Texas. 2011. "Zoning ordinance: Downtown business/government district Section 2-818 BG." Retrieved from http://www.plano.gov/ Departments/ Planning/zoninglanddevelopment/Pages/default.aspx.
- Dallas Area Rapid Transit. 2008. "Transit-oriented development TOD guidelines." Retrieved from http://www.dart.org/economicdevelopment/DARTTOD Guidelines2008.pdf.
- DART. 2009. "Agency overview." Retrieved from http://www.dart.org/about/dart overviewdec09.pdf.
- Downtown Plano Retail Task Force. 2008. "Downtown Plano retail action plan." Retrieved from http://www.plano.gov/Departments/Planning/ planningdocuments/ Pages/default.aspx.
- Jarrell, P., Planning Director, City of Plano, Texas. 2011. Personal interview.
- Reconnecting America and Center for Transit-Oriented Development. "TOD 202: Station area planning: How to make great transit-oriented places." Retrieved from http://www.reconnectingamerica.org/public/show/tod202.
- Turner, F., Assistant City Manager, City of Plano. 2011. Personal interview.
- Turner, F. 2011. "Downtown Plano: Creating a transit village."
- Wierzenski, J., Director Economic Development, DART. 2011. Personal interview.

Downtown Plano Station Neighborhood Data

Transit Operator Dallas Area Rapid Transit

Transit System Name DART

Transit Corridor Name Red Line

Transit Mode Light Rail (LRT)

Location (Metro Area) Dallas, TX

Region (USA) South

Station Name Downtown Plano Station

Station Location Plano, TX

Station Typology* Transit Town Center

Role of Station within Corridor Destination and Commuter

Defined Neighborhood Size Approximately 1/4 mile from station

Land Use Description Downtown Plano Station has a rich mix of uses, including residential, commercial, and civic. Historic Haggard Park is located in the center of downtown directly adjacent to the station.

Redevelopment Plan/Special Zoning Business/Government Zoning District

Land Use Standards that Encourage TSD

Governing Document Business/Government Zoning District

Densities 40 to 100 DU/AC (for multi-family) and Max. 40 DU/AC (for townhomes)

Building Heights 4 stories

Floor Area Ratios Max. 4:1

Parking Requirements Multi-family = 1:1 (1 bdrm.); 1.5:1 (2 bdrm.); 2:1 (3 or more bdrm.) Townhomes = 2:1 All other uses = 1 per 300 SF

Encouraged Land Use Mix Mixed Use, High Density Residential

Station Placemaking Features: Historic Park and new mixed-use development with plaza

Significant Transit Supportive Development

I. Lexington Park at Rice Field (1600-1625 Carpenter Drive) 98 luxury townhomes surrounding a new park (at full buildout) on 6.3 acres. 14 townhomes are currently built.

2. 15th Street Village (Intersection of 15th Street and Avenue G) 34 townhomes and 90 condominiums on 4 acres (at full build-out). 13 townhomes and 31 condominiums are currently built. Parking for townhomes are attached and accessed via

alley, and parking for condominiums is located on the ground floor of the building.

3. **Plano Courtyard Theater (1509 H Avenue)** 20,000 SF rehabilitation project of an old high school and gymnasium into a performing arts center with offices. Parking is available in a surface lot adjacent to the building.

4. Eastside Village I (Intersection of 15th Place and Avenue K) 15,000 SF of commercial space and 234 residential units on 3.6 acres. A parking structure is provided in the center of the block, which is wrapped with housing.

5. Eastside Village II (Intersection of 15th Street and Municipal Ave.) 25,000 SF of commercial space and 229 residential units on 3.1 acres. A parking structure is located in the center of the block.

NOTES: * From CTOD's Station Area Planning: How to Make Great Transit-Oriented Place

Del Mar Station, Gold Line, Pasadena, CA

Prepared by: New Jersey Institute of Technology Van Meter, Williams, Pollack, LLP

A previous section of this Guide focuses on the Los Angeles County Metro Rail Gold Line and its associated planning for transit-supportive development. This section focuses on one station neighborhood along the Gold Line and the specific planning and policies enacted to encourage and enable transit-supportive developments. Highlights of specific transit-supportive developments are also provided.

Case Facts	
Station Name:	Del Mar
Station Location:	Pasadena, California
Transit System Name:	Metro
Transit Corridor Name:	Gold Line
Transit Mode:	Light rail
Region (USA):	Southwest
Role of Station within Corridor:	Destination and commuter
Station Typology:	Urban Center
Municipal Characteristics:	
Location	10 miles northeast of downtown Los Angeles
Size	22.5 square miles
Population	137,122, residents (based on 2010 Census)

Overview of the Los Angeles County Metro Rail Gold Line

The original Gold Line, on which Del Mar Station lies, is a light rail transit system running from Union Station in downtown Los Angeles to Sierra Madre Villa in Pasadena. The corridor is 13.7 miles long, includes 13 stations, and connects 3 municipalities—Los Angeles, South Pasadena, and Pasadena (see Figure 5B-27). The corridor is mainly an inter-urban commuter line, although Downtown Los Angeles and Downtown Pasadena are major destinations along the route. The Gold Line was extended by 5.9 miles in 2009. This Eastside Extension runs from Union Station, a terminus of the original Gold Line, to East Los Angeles. The Foothill Extension, which will extend the Gold Line from its East Pasadena terminus to Montclair, is in the planning stage.



Source: http://www.metro.net/riding_metro/maps/images/rail_map.pdf and Van Meter, Williams, Pollack, LLP

Figure 5B-27 Original Gold Line Corridor and Stations

Del Mar Station

Del Mar Station (see Figure 5B-28), located in Pasadena, is situated approximately 25 minutes from Union Station and 10 minutes from the Sierra Madre Villa Station, the two termini of the original Gold Line. (See chart at the end of this section for data pertaining to the Del Mar Station and its associated neighborhood). It is located on the southern edge of Old Pasadena, a designated historic district of Pasadena. Originally, Del Mar Station and Sierra Madre Villa Station were both environmentally cleared as potential terminus for the Gold Line, but the community assumed the terminus would be at Sierra Madre Villa. Instead, the Del Mar Station was proposed as the terminus as part of a budgetcutting strategy. The City of Pasadena and the local community successfully argued against that strategy, since planning activities were well underway near both stations.

Figure 5B-28

Del Mar Station, Pasadena, CA



Source: Courtesy of Moule & Polyzoides, Architects and Urbanists; photograph by Tom Bonner Photography

The site of Del Mar Station formerly contained a passenger rail station for Amtrak when the same right-of-way carried freight and passengers to Los Angeles. This historic site included a train depot and surface parking lots before a new development was proposed on the 3.4-acre site, coinciding with the arrival of the new light rail line (see discussion of Archstone Del Mar below).

Del Mar Station serves as both a destination and commuter station. Using CTOD's typology, Del Mar station is located in an "Urban Center," which is characterized as having a mix of residential, employment, retail, and entertainment uses at slightly lower densities and intensities than "Regional Centers." While Urban Centers serve as a commuter hub, they also draw residents from surrounding neighborhoods to their preserved historic community. Destination elements in the Del Mar Station neighborhood include Old Pasadena, the historic downtown; Colorado Boulevard, the famous street of the Parade of Roses; Olmsted-designed Central Park; and architectural civic buildings constructed according to the 1925 Bennett Plan, which established a Beaux Arts framework for the city. Ridership has increased since the 2003 station opening. Average weekday boardings of 768 in 2004 increased by 160 percent to 1,225 in 2009.

Planning for Transit-Supportive Development

The City of Pasadena was forward-thinking in realizing the potential of the Gold Line. In the early 1990s, while the line was not the transit agency's top priority, Pasadena was in the midst of updating its General Plan. At the time, there was considerable discussion regarding the potential for and extent of growth, and the impact a rail line could or would make regarding traffic, mobility, and density. The City decided that specific plans were needed for each of the proposed station areas that would both encourage transit-supportive development and build upon the attributes of each neighborhood. The 1994 Land Use Element of the General Plan required preparation of seven Specific Plans, with the purpose of directing new development to areas along major corridors and adjacent to the proposed Pasadena Blue Line light rail stations. Development of the plans at an early stage was a clear acknowledgement that station areas can benefit from different approaches to fully maximize their potential.

Central District Specific Plan

Promoting transit use is one of the many objectives outlined in the Central District Plan, which covers the Del Mar Station area. Specifically, the objective indicates that regional transit will be supported by transit-oriented development near light rail stations. The Central District Specific Plan is further divided into seven sub-districts (see Figure 5B-29). The Del Mar Station is located within the Old Pasadena Sub-district, and the Del Mar Station neighborhood, which is discussed in more detail below, lies within the Old Pasadena, Arroyo Corridor/ Fair Oakes, Civic Center/Midtown, and In-town Housing sub-districts.



Source: http://ww2.cityofpasadena.net/planning/deptorg/commplng/GenPlan/centdis.asp

Figure 5B-29 Central District Specific Plan Sub-Districts

Recognizing that the character of sub-districts overlapped, six of the sub-districts were further divided into precincts (see Figure 5B-30). The Del Mar Station is located within the Old Pasadena Historic Core Precinct, and the Del Mar Station neighborhood, which is discussed in more detail below, lies within Precincts A, B, F, and G.



Source: http://ww2.cityofpasadena.net/planning/deptorg/commplng/GenPlan/centdis.asp

Figure 5B-30 Precinct Map

Included within the Central District Specific Plan are recommendations by precinct for planning and development aspects, such as land use distribution, land use intensity (including FAR and parking considerations), residential distribution, and residential intensity. As an example, the area immediately to the east of Del Mar Station allows high-density development, with a FAR of 3.0 and 87 dwelling units/acre. (See http://ww2.cityofpasadena.net/planning/deptorg/commplng/ GenPlan/centdis.asp for more information on the Central District Specific Plan).

Business Improvement Districts (BIDs)

To spur economic development, BIDs were implemented in three districts throughout the city. The Old Pasadena BID was formed in 2000 and is contained within the Del Mar Station neighborhood. District-wide security, marketing, and maintenance programs are financed through annual tax assessments on business owners in the district.

Del Mar Station Neighborhood

For purposes of this transit station neighborhood analysis, the Del Mar Station neighborhood occupies approximately 200 acres and is defined as an area over 1/4-mile radius from the station. It is roughly bordered by West and East Colorado boulevards on the north, Bellevue Drive on the south, S. Euclid Avenue on the east, and S. Pasadena Avenue on the west (see Figure 5B-31). The neighborhood has historic streets and good connectivity. Three streets are defined as primary arterials—Arroyo Parkway, Fair Oaks Avenue, and Colorado Boulevard. Minor arterials include Del Mar Boulevard and Marengo Avenue.



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PLANNING FOR TRANSIT SUPPORTIVE DEVELOPMENT DEL MAR STATION PASABOLICA I SEPTEMBER, 2010

Source: Van Meter Williams Pollack, LLP

Figure 5B-31 Study Area

VAN METER WILLIAMS POLLACK

The Del Mar Station neighborhood includes a rich mixture of uses, including residential, commercial, office, retail, and civic. The 2010 land uses include approximately 25–30 percent residential, 30–40 percent commercial (retail and office), and about 15–20 percent mixed use (active ground floor with retail or office above). There is a small percentage of hotels, churches, civic buildings, and schools. Central Park, adjacent to the station, represents the five percent of neighborhood open space. Building heights range from four to seven stories adjacent to the station, to one- and two-story structures in the older residential and commercial sections. The newer mixed-use projects that have developed as a result of the District Specific Plan and Sub-District plans tend to be in the fourstory range.

Del Mar Station Neighborhood's Transit-Supportive Developments

The land use planning that preceded and accompanied the development of Del Mar Station built upon the strengths and character of the station neighborhood, rather than attempting to alter it. Two catalyst projects, both of which preceded the Central District Specific Plan and corresponding Sub-District plans, were consistent with the evolving vision and proved to be key draws. The Central District Specific Plan rightfully assumed that the bulk of new development would come in the form of infill and accordingly included regulations that would encourage compatible development blending with the fabric of Old Pasadena.

Development activity in the Del Mar Station neighborhood has been strong since 2000. Most of the land use changes within the neighborhood have been commercial properties converted to residential, or a combination of residential and commercial uses (mixed use). Seventeen of the 27 blocks in the study area have seen new development or have a plan for new development in place, including the "refill" of businesses along Colorado Boulevard (See Figure 5B-32).



AREAS OF CHANGE / SIGNIFICANT PROJECTS

PLANNING FOR TRANSIT SUPPORTIVE DEVELOPMENT DEL MAR STATION PASADEMA, CA I SEPTEMBER, 2010 Source: Van Meter, Williams, Pollack, LLP

VAN METER WILLIAMS POLLACK

Figure 5B-32

Area of Change and Transit-Supportive Developments in the Del Mar Station Neighborhood

This section highlights some of the transit-supportive developments that have been constructed over the past decade. The first two—Archstone Del Mar and Paseo Colorado—are considered catalyst projects. They were the first large projects constructed near the light rail station that had significant public sector participation and funding.

Archstone Del Mar

Occupying 3.4 acres, Archstone Del Mar includes 4 separate buildings that range from 4–7 stories and straddle the Gold Line light rail tracks. This \$150M development consists of 347 housing units, 20,000 SF of retail, court yards and plazas, a parking structure, the light rail station, and the restored former Pasadena Santa Fe Depot. Most of the housing is rental, with a percentage reserved as low-income units.

While the planning and permitting for this project preceded the development of the Central District Specific Plan and Old Pasadena Sub-District Plan, the project clearly reflects the City's objective to support the vitality of the historic core through development associated with the anticipated light rail station. The design also reflects sensitivity toward the neighborhood, complementing rather than intruding upon the existing street grid. As testimony to the developer's attention to detail, the original Spanish Revival-style building that was once Pasadena Santa Fe Depot was moved off-site during construction to be reassembled, and is now occupied by the La Grande Orange restaurant.

Public sector participation in this project was important. The Gold Line Construction Authority sold the property to the development team and entered into a joint agreement for the construction of a 1,200-space parking garage. Under the terms of the agreement, half of the parking spaces were dedicated to transit riders, which was consistent with the EIS requirements of the Authority. The Gold Line Construction Authority paid half of the garage's construction costs and retained the subterranean rights to the 600 spaces. The City of Pasadena also contributed a State grant to the project. While the idea was to have the garage serve as a partial park-and-ride for commuters, the need was never realized. As a result, the Gold Line Construction Authority sold its interest in the parking garage to the City of Pasadena at a discount. The City now uses the spaces as part of the Old Pasadena parking credit program. This program allows business owners to rehab existing buildings without having to provide the required off-site parking; instead, they pay a fee to the City, which operates the public parking garages that provide the parking spaces.

Public Art was also an important consideration for this development. The City of Pasadena required one percent of the project's value be dedicated to art. MTA's Art for Rail Transit (A-R-T) program involves a Community Advisory Committee for the selection of artists and for design review for public art at each transit station. A 550-foot-long wrought stainless steel fence, composed of discs, axles, arcs, shafts, and pistons reminiscent of the old steam locomotives, was installed at the Del Mar Station. Additionally, four 6-feet-diameter medallions constructed from forged bronze and containing lighting elements top the plaza elevator tower. Four stainless steel panels at the base of the tower enclose the stairwells to the parking garage. Figure 5B-33 provides photos and relevant data for the Archstone Del Mar project.



Source: Courtesy of © Moule & Polyzoides, Architects and Urbanists; photograph by Tom Bonner Photography



Source: Van Meter, Williams, Pollack LLP



Source: Van Meter, Williams, Pollack LLP

Source: Van Meter, Williams, Pollack LLP

Figure 5B-33 Archstone Del Mar

Paseo Colorado

Paseo Colorado, located roughly in the middle of Old Pasadena and an approximately five-minute walk from Del Mar Station, is a three-block urban village. It represents one of the rare opportunities to correct an earlier mistake in urban planning since it occupies the previous site of an enclosed shopping mall. Except for a Macy's retail store and its underground parking, the original structure was stripped to the steel beams. In its place is a series of plazas and pedestrian "paseos" instead of streets, which now connect more than 500,000 SF of commercial space, including 56 retail shops, the original Macy's department store, a cinema, a supermarket, 3,000 parking spaces, and 387 residential rental units. The residential units were not part of the original plan but were added to make the project feasible. Their addition was instrumental in creating a true mixed-use feel more consistent with the neighborhood. The City used revenue bonds to upgrade the parking. The revenue bonds were backed by parking revenues and by anticipated increases in ratables. The retail stores opened in September 2001, and the residential units opened in spring of 2002. Figure 5B-34 provides photos and relevant data for the Paseo Colorado project.



Source (all photos): Van Meter, Williams, Pollack LLP **Figure 5B-34** Paseo Colorado

Pasadena Conference Center Expansion

The Pasadena Conference Center Expansion is a phased project that fits in the catalyst category for future developments. The intent of the expansion is to enhance the city's competitive position for attracting conventions and conferences through the rehabilitation of an attractive but aging facility. While the facility benefits from station proximity, this is not a single neighborhood or station project. Phase I includes removing Mishima Plaza and constructing a new ballroom core and shell (55,600 SF) to serve as a temporary exhibit hall. Phase 2 includes demolishing the westernmost Exhibit Hall (48,500 SF), and constructing a new 160,700 SF Exhibit Hall. Phase 3 includes the completion of the ballroom, renovation of the existing conference center east of Civic Auditorium forecourt to its original condition, removal of an ice skating rink, removal of an existing 850-space parking garage, and construction of a new parking structure accommodating 1,030 spaces. Figure 5B-35 provides photos and relevant data for the Pasadena Conference Center Expansion project.




Source (all photos): Pasadena Convention Center, http://pasadenacenter.com/media.html

Figure 5B-35 Pasadena Conference Center Expansion

Westgate Pasadena

Westgate Pasadena is a 12-acre site that was associated with a former church and school. It occupies two city blocks located between Pasadena and DeLacey avenues from Dayton Street to Del Mar Boulevard. The first block is now complete and the second remains vacant. Together, the two-block project will include 480 apartments, 352 condominiums (380 of the proposed units were completed in phase 1), and 22,000 SF of retail. Parking is located underground. Figure 5B-36 provides photos and relevant data for the Westgate Pasadena project.





Source: Van Meter, Williams, Pollack LLP



Source: Courtesy of Thomas P. Cox Architects



Source: Van Meter, Williams, Pollack LLP



Source: Courtesy of Thomas P. Cox Architects

Other Notable Projects

There are several other notable transit-supportive development projects in the Del Mar Station neighborhood. Figures 5B-37, 5B-38, 5B-39, and 5B-40 provide photos and relevant data for these projects.



Source: Van Meter, Williams, Pollack LLP

Figure 5B-37 Pasadena Place

Source: Courtesy of Brigham Yen



Source: Van Meter, Williams, Pollack LLP

Figure 5B-38 Messina



Source: Van Meter, Williams, Pollack LLP



Source: Van Meter, Williams, Pollack LLP

Figure 5B-39 Delacey Flats

Source: Van Meter, Williams, Pollack LLP



Source: Van Meter, Williams, Pollack LLP

Source: Van Meter, Williams, Pollack LLP

Figure 5B-40 215 S. Marengo Condos

Lessons Learned

Larger catalyst projects, such as Del Mar Station and Paseo Colorado, are important first pieces to a transit-supportive development neighborhood. There is no single formula for putting the projects together; patience, persistence, and cooperation are key ingredients. Local government and public agencies' involvement were critical components to the success of these projects. Both the City and the Gold Line Construction Authority helped make Del Mar Station possible. The willingness of the Gold Line Construction Authority to enter into joint ventures to accommodate parking requirements in station areas was a beneficial element of several projects along the corridor. Pasadena's ability to leverage ownership of the parking at Paseo Colorado was a benefit to this joint development.

Some smaller projects, particularly those with multiple goals, are excellent targets for public/private partnerships. The Holly Street project was developed to coincide with the opening of the Gold Line, representing an example of the types of transit-supportive development that might accompany planned stations. It also represents an attempt by the City of Pasadena to jumpstart housing construction in what had been an extremely slow market, to ensure an excellent transition between old and new neighborhood uses, and to gain moderate-income housing (20%). Pasadena invested heavily in this 374 unit, mixed-use project that extends over the Gold Line. Due to the frequent delays in the line's construction, the Holly Street project preceded it by six years—and included transit passes as part of its marketing.

With careful and advance planning, infill projects at higher densities can fit unobtrusively into established neighborhoods. The borders between neighborhoods, like the borders between communities, **deserve special attention**. In Pasadena, the Sub-District plans considered and planned for these transition areas.

References

- City of Pasadena Planning and Development Department, Planning Division. 2004. "Central District specific plan." Retrieved September 13, 2010, from http://ww2.cityofpasadena.net/planning/deptorg/commplng/GenPlan/centdis. asp.
- City of Pasadena Planning and Development Department. "Major projects & activity." Retrieved September 20, 2010, from http://ww2.cityofpasadena.net/planninganddevelopment/developmentprojects/projects.asp.
- Dahl, L., and J. Poindexter, Pasadena Planning & Development. 2010. Personal interview.
- Filmanowicz, S. 2006. "Westgate Pasadena case study." Retrieved September 20, 2010, from Congress for the New Urbanism website: http://www.cnu.org/ node/276.
- "Going for the gold: California stories on the Los Angeles Metro Gold Line: communities, public art, and placemaking." Retrieved September 20, 2010, from University of Southern California Libraries website: http://libguides.usc. edu/content.php?pid=31652& sid=541130.
- Lund, H., and R. W. Willson. 2005. "The Pasadena Gold Line: Development strategies, location decisions, and travel characteristics along a new rail line in the Los Angeles region." Mineta Transportation Institute College of Business, San Jose State University.
- Menard, J. 2007. "Del Mar Station case study." Retrieved September 20, 2010, from Congress for the New Urbanism website: http://www.cnu.org/ node/1503.
- "Old Pasadena Management District." Retrieved from The Real Downtown Old Pasadena website: http://www.oldpasadena.org/about.asp.
- Polyzoides, S., Moule & Polyzoides Architects and Urbanists. 2010. Personal interview.
- Reconnecting America's Center for Transit-Oriented Development. 2008. "Station area planning: How to make great transit-oriented places." Washington, D.C.: FTA CA-26-1007.
- Research and Innovative Technology Administration, Bureau of Transportation Statistics. 2001. "Highlights of the 2001 national household travel survey." Retrieved September 21, 2010, from http://www.bts.gov/publications/ highlights_of_the_2001_national_household_travel_survey/html/executive_ summary.html.
- Urban Land Institute. 2002. "Urban Land Institute development case study: Paseo Colorado case study." Volume 32, Number 09, Case Number C032009.

Del Mar Station Neighborhood Data

Transit Operator Los Angeles County Metropolitan Transportation Authority (LACMTA)

Transit System Name Metro

Transit Corridor Name Gold Line

Transit Mode Light Rail (LRT)

Location (Metro Area) Los Angeles, CA

Region (USA) Southwest

Station Name Del Mar Station

Station Location Pasadena, CA

Station Typology* Urban Center

Role of Station within Corridor Destination and Commuter

Defined Neighborhood Size Approximately 1/4 mile from station

Land Use Description Del Mar Station Neighborhood includes a rich mix of uses such as urban housing, retail, entertainment and office. A large neighborhood park sits adjacent to the station providing a public open space for residents and visitors. A couple lots in the neighborhood are dedicated to parking for neighborhood uses (both structured and surface parking).

Redevelopment Plan/Special Zoning Central District Specific Plan

Land Use Standards that Encourage TSD

Governing Document Central District Specific Plan

Densities Maximum 60-87 DU/AC

Building Heights Maximum 75' (average height)

Floor Area Ratios Maximum 2.0 to 3.0 FAR

Parking Requirements Commercial: Max. reduction of 25% to 3 per 1,000 SF Residential: Max. reduction of 10% to 1.5/unit (over 650 SF) or 1.75/unit (max.)

Encouraged Land Use Mix Commercial, Residential and Mixed Use

Station Placemaking Features Public Plaza and Fountain, Seating Areas

Significant Transit Supportive Development

1. **Pasadena Place (169 W. Green St.)** 5-story, mixed-use development with 8,200 SF office and 38 residential units on 0.4 acres with 2 levels subterranean parking with 78 spaces.

2. **Paseo Colorado (280 E. Colorado Blvd.)** 3-square-block urban village (replaces enclosed 1970s mall) includes 56 retail shops, Macy's dept. store (part of original mall), 7 destination restaurants, 6 quick service café's, a health club, day spa, supermarket, and a 14-screen cinema for a total of 557,323 SF, 387 apartment units and 3,000 parking spaces on 10.9 acres.

3. DeLacey at Green (100-120 West Green St.) 4-story, mixed-use development with 8,836 SF retail/office and 61 condominiums over 2 levels subterranean parking with 179 spaces on 1.2 acres.

4. Messina Mixed Use (65 West Dayton St.) 4-story, mixed-use development with 12,700 SF retail/office and 42 residential units on 0.3 acres with 3 levels subterranean parking with 151 spaces.

5. **Pasadena Conference Center (300 E. Green St.)** Phase I - removal of Mishima Plaza and construction of new 55,000 SF Ballroom core and shell (temporary exhibit hall). Phase 2 - removal of westernmost Exhibit Hall and construction of new 161,300 SF Exhibit Hall. Phase 3 - completion of Phase I Ballroom and renovation of existing conference center east of Civic Auditorium and landscaping. 850 space garage demolished and replaced with 1,030 parking spaces underground. Total campus site is approximately 9.8 acres

6. Westgate Pasadena (231 DeLacey Ave.) Series of 4-story buildings (380 apartments and 352 condominiums) with 22,000 SF retail and subterranean parking on 2.5 city blocks. Site includes public paseos and semi-public courtyards. Phase I is built and includes the 480 apartments. Phase I is approx. 6.4 acres.

7. DeLacey Flats (250 S. DeLacey St.) 6-story, mixed-use development with 5,000 SF retail/office and 34 condominiums on 0.66 acres over 2 levels subterranean parking with 92 spaces.

8. Archstone Del Mar Station (252 S. Raymond Ave.) 4 new buildings ranging from 4 to 7 stories. mixed-use development including 12,306 SF retail, 347 residential units (21 affordable), and adaptive reuse of 7,694 historic depot building (restaurant) on 3.4 acres. 3 and 4 levels of subterranean parking holds 1,200 spaces (600 for Del Mar Station and 600 for residential).

9. The Dalton (238 S. Arroyo Pkwy.) 4-story building with 55 residential units and 7,000 SF retail at grade on 0.84 acres. Parking provided underground.

10. **215 South Marengo Condos (215 South Marengo Ave.)** 2 and 3-story condominium studio project with 38 units (3 reserved for very low income households) at 549 SF each on approx. 0.4 acres. One level of subterranean parking with 38 spaces.

NOTES: * From CTOD's Station Area Planning: How to Make Great Transit-Oriented Place

Pearl District, Portland Streetcar Line, Portland, OR

Prepared by: New Jersey Institute of Technology Van Meter, Williams, Pollack, LLP

In the "Case Studies in Corridor Planning" section, a case study focuses on the Portland Streetcar and how transit-supportive development was planned and implemented. This section focuses on one neighborhood along the Portland Streetcar line and the specific planning and policies enacted to encourage and enable transit-supportive development. Highlights of specific transit-supportive developments are also provided.

Case Facts	
Station Name:	Pearl District (II Station Areas: NW 13th & Lovejoy, NW 12th & Northrup, NW 10th & Marshall, NW 10th/11th & Johnson, NW 10th/11th & Glisan, NW 10th/11th & Everett, NW 10th/11th & Couch)
Station Location:	Portland, Oregon
Transit System Name:	Portland Streetcar
Transit Corridor Name:	Portland Streetcar
Transit Mode:	Streetcar
Region (USA):	Northwest
Role of Station within Corridor:	Downtown circulator
Station Typology:	Urban Neighborhood
Municipal Characteristics:	
Location	Portland
Size	145.4 square miles
Population	583,776 residents (as of 2010 Census)

Overview of the Portland Streetcar

The Portland Streetcar system (see Figure 5B-41) functions as a downtown circulator. It runs through the city of Portland on an eight-mile continuous loop (four miles each way) from Legacy Good Samaritan Hospital at NW 23rd Avenue, on Lovejoy and Northrup, through the Pearl District, and on 10th and 11th Avenues to SW Mill and SW Market streets, Portland State University Urban Center, SW Harrison Street, RiverPlace, Oregon Health Sciences University, the Aerial Tram, and to a terminus at SW Lowell and Bond at the

South Waterfront District. There are 46 stops spaced every 3 to 4 blocks. The first segment was opened in July 2001, and the final phase connecting to SW Lowell and Bond was completed in 2007. A new loop extension was under development in 2011.

Figure 5B-41

Portland Streetcar

System Map



Source: www.portlandstreetcar.org and Van Meter Williams Pollack, LLP

The Pearl District

For purposes of this case study, the Pearl District neighborhood has been identified as the area between NW 13th and NW Park avenues from Burnside Street to Hoyt Street, and from NW 13th Avenue to NW 9th Avenue from Hoyt Street to Overton Street (see Figure 5B-42). This 58-block area contains II stops on the streetcar system. The area is a 10-minute walk from end to end and offers a rich blend of transit-supportive projects. The Pearl District was one of the motivations for the streetcar system; it offered an opportunity to connect two active areas while providing access to an underutilized area of unlimited potential. The Pearl District had already developed a reputation for its art community and offered a mixture of warehouses and other structures capable of rehabilitation and adaptive reuse. In addition, it contained a substantial amount of vacant land to accommodate new development. The land purchased by Hoyt Street Properties became the site of the first major project for the Pearl District and a major benefactor of the evolving streetcar project. (See chart at the end of this section for data pertaining to the Pearl District).



Figure 5B-42 Pearl District Neighborhood

Study Area

Source: Van Meter Williams Pollack, LLP

According to CTOD's typologies, the Pearl District stations are located in an "Urban Neighborhood," which is characterized by predominantly moderate- to high-density residential uses with local-serving retail and employment, and good access to regional and sub-regional centers. Many residents commute easily to accessible employment centers. The neighborhood also serves as a destination for the local art galleries, restaurants, and retail shops.

Planning for Transit-Supportive Development

As indicated in the case studies section, a central theme of the Portland Streetcar project, from its vision through planning and implementation, was encouraging transit-supportive development as a way to realize a set of goals important to the city and its neighborhoods. The project focused on solving problems—inadequate parking, providing access in a low impact way, connecting activity nodes, and encouraging new residential development close to employment centers. Transit in Portland has always been viewed as a part of the overall plan and as a way to accomplish multiple goals. Having other factors in place, such as supportive land use planning, is equally important for realizing livable, sustainable neighborhoods.

Land use planning in Portland is straightforward. There are few zoning categories, all of which provide considerable flexibility. There are a series of Redevelopment Plans built around Urban Renewal Districts that provide a source of funding for improvements. However, the key tool for redevelopment of major projects in Portland are the developer agreements. The agreements work with the planning controls, delineate developer and city responsibilities, provide time lines, and establish incentives.

The 1988 Central City Plan laid the foundation for planning in the Pearl District. The 1992 River District Vision Plan and 1994 River District Development Plan provided more specific guidance. The River District Urban Renewal Plan was adopted in 1998. Concurrent with the development plans and planning for the streetcar system, there were discussions about development of the Hoyt Street Property, a 40-acre parcel of former railroad property. The developer's agreement, negotiated between the Portland Development Corporation and Hoyt Street Properties (1997), included the streetcar line and called for densities to increase upon its completion. This was one of several city and developer commitments built into the agreement that triggered incentives. The Hoyt Street Property (see Figure 5B-43) subsequently became a catalyst for the Pearl District.



Source: Hoyt Street Property-Amended and Restated Agreement for Development, 1999

In the Hoyt Street Properties Developer Agreement, densities increased as developer and public sector milestones were reached, moving from 15 to 87 and to more than 100 dwelling units/acre. Other incentives were attached to the establishment of parks, the locations of which are illustrated on Figure 5B-44. Affordable housing goals were also included in this development and for all residential projects. More than 30 percent of the 2,000 units constructed in the Pearl District are deemed affordable. Rather than dictate requirements to the development community, the City of Portland's approach is to clearly state what the public sector is prepared to do to encourage and support development.



Source: Hoyt Street Property-Amended and Restated Agreement for Development, 1999

The Pearl District, once dominated by abandoned rail yards and decaying industrial buildings, has experienced new development and adaptive reuse of old structures throughout the entire neighborhood. The Pearl District experienced so much early success that in 2001, a new Pearl District Development plan, A Future Vision for a Neighborhood in Transition, was developed as a reminder of the district's original goals, and as a means to agree on priorities for the future.

As noted in the "Economic Benefits of Transit-Supportive Development" section, the economic benefits derived from implementation of the Portland Streetcar

are remarkable. In this example of integrating transit planning with land use planning, the vision of transit supporting development became a reality.

The Pearl District's Transit-Supportive Developments

This section provides an overview of transit-supportive developments that have developed since 1999. They include a combination of new structures and rehabilitation of older structures, all of which contribute to the unique fabric of the Pearl District. Figure 5B-45 illustrates the developments' locations within the Pearl District.



Figure 5B-45

Areas of Change and Transit-Supportive Developments in the Pearl District

Source: Van Meter Williams Pollack, LLP

Bridgeport Condominiums

The Bridgeport Condominiums are located one block west of Tanner Springs Park, between 11th and 12th avenues and Northrup and Marshall streets. The Portland Streetcar, running north, turns from 10th Avenue onto NW Northrup Street and heads west toward Northwest Portland's Nob Hill neighborhood. The Bridgeport Condominiums project was completed in 2003 and includes a total of 123 residential units and 8,000 SF of ground floor retail on a standard Portland block (200' \times 200'), or 0.9 acres (see Figure 5B-46). The block is divided into two separate seven-story buildings, oriented north-south, and is connected by a public passage and courtyard. Hoyt Properties noted that the design was inspired by the great European cities that design pedestrian access through blocks, rather than only around the perimeter.



Bridgeport Condominiums



Source: Van Meter Williams Pollack, LLP

Streetcar Lofts

One block south of the Bridgeport Condominiums, between Marshall and Lovejoy streets, is another Hoyt Properties project, the Streetcar Lofts building (see Figure 5B-47). Completed in 2001, this building includes 139 residential units and 9,000 SF of ground floor retail on 0.9 acres. At the corner of 11th Avenue and Lovejoy Street, the streetcar loop returns from the Nob Hill neighborhood (along Lovejoy Street) and turns southward down 11th Avenue. This is where the famous "Go By Streetcar" sign can be seen on the iconic two-story concrete building. An L-shaped residential tower opposite the corner with the famous sign rises above the ground floor retail with a second-story, private courtyard for residents.



Source: Van Meter Williams Pollack, LLP

Park Place Condominiums

One block south and east of Streetcar Lofts are Park Place Condominiums, a Hoyt Properties project (see Figure 5B-48). Park Place is directly north of the popular Jamison Square Park, with its famous water fountain, and is separated from the park by a pedestrian promenade (not a through-traffic street). The Park Place block also allows pedestrians to permeate through it with a public passage and courtyard between two buildings. The block is made up of two separate buildings oriented north-south—a I3-story tower on the west side and a 3-story building on the east side. A coffee shop and restaurant are located on the ground floor, overlooking the pedestrian promenade and Jamison Square.

Completed in 2004, this project includes a total of 124 residential units and 15,000 SF of ground floor retail. Residential typologies include flats, lofts, penthouses, townhomes with rooftop terraces, and live-work units. Parking for residents is provided underground.



Source: Van Meter Williams Pollack, LLP

Figure 5B-48

Park Place Condominiums

Johnson Street Townhomes

Located one block south and west of Jamison Square Park are the Johnson Street Townhomes, a Hoyt Properties project (see Figure 5B-49). Located on half of the block (0.45 acres), between 11th and 12th avenues and Johnson and Irving streets, the project includes 13 townhomes with private front door gardens and attached 2-car garages. This project was completed in 1999 and is the recipient of multiple design awards.

Figure 5B-49

Johnson Street Townhomes



Source: Van Meter Williams Pollack, LLP

Pearl Block Townhomes

On each side of 11th Avenue between Johnson and Hoyt streets are two superblocks separated by a pedestrian promenade that runs on axis with Irving Street, bisecting the super-blocks. Pearl Block Townhomes are located on both sides of 11th Avenue, where the streetcar runs south between Hoyt Street and the pedestrian promenade. Once used as warehouses for the railroad, these buildings have been converted to high-end townhomes (see Figure 5B-50). Completed in two phases, in 1997 and 2000, the project includes a total of 20 units, 10 on each side of the street, facing the streetcar line. Each unit includes an attached garage.

Figure 5B-50

Pearl Block Townhomes



Source: Van Meter Williams Pollack, LLP

The Brewery Blocks

At the south end of the Pearl District, separated from the Central Business District by Burnside Street, are five blocks known as The Brewery Blocks. This site, including three blocks from 10th to 13th avenues and Davis to Couch streets and two blocks from 11th to 13th avenues and Couch to Burnside streets, was purchased by Gerding Edlen Development with a vision to preserve the historic buildings and convert the land use to mixed uses, including office, retail, and residential (see Figure 5B-51).

Figure 5B-51 The Brewery Blocks



Source: Van Meter Williams Pollack, LLP

Three historic buildings that were preserved include the Henry Weinhard Brewhouse, the Portland Armory, and a Chevrolet auto dealership. The Portland Armory was converted into the Gerding Theater that now enhances the nighttime experience of the neighborhood. Even though it would have been more profitable to convert this half block into residential units, the developer decided that the original goal of preserving the character of the old buildings was more important. The theater was one of the first historic buildings and theater buildings to achieve LEED[™] (Leadership for Energy and Environmental Design) certification in the United States. The Chevrolet building was converted to a Whole Foods Market with offices above. Additional building square footage was added atop the original structure. The Weinhard Brewery was converted into a mixed-use block, including retail, restaurants, and office space.

The entire five-block development includes approximately 540,000 SF of office and 365 residential units above 160,000 SF of ground floor retail. Buildings range from 1 to 14 stories. The entire project was completed in 2006, with some portions opened by 2003. Parking for the development is located underneath 2¹/₂ city blocks with 3 stories of underground parking, totaling 1,350 spaces. The Henry Condominiums have a separate parking structure. One parking study found that greater density on the site could be accommodated if shared parking strategies were utilized. The study found that the peak parking hours were between 10 AM and 3 PM on weekdays, signifying that office tenants used the majority of parking spaces. As a result, more density, in the form of apartments and hotels, with greater morning and evening parking demand, could be supported on-site with the existing parking.

The Brewery Blocks project was the result of a successful public/private partnership. The streetcar, as a public amenity, was a great example of public investment that helped to spur private development in the area. The developers received a \$2.5M grant for streets, sidewalks, lamps, and benches to improve the pedestrian experience. A \$6M loan from the city went toward paying for the massive underground parking structure. In exchange, Gerding Edlen took 100 percent of the financial risk, and built 1.7M SF of development on the 5 city blocks. They invested nearly \$300M. As with most properties adjacent to the streetcar, the payoff was worth the risk. According to Gerding Edlen's presentation on Financing Transit-Oriented Development, "Investors were returned five times their investment in a recent sale with a 32 percent IRR measured over 7 years" (Gerding Edlen Development, nd). For more information on The Brewery Blocks, see "Funding and Financing Public Transit and Transit-Supportive Development."

Lessons Learned

Developers build projects, but the public sector creates the space. The Pearl District was always a joint venture project. Through the incentives built into the developer's agreement, both the City of Portland and the developer agreed to invest in public improvements, ranging from the streetcar, to streetscapes, parks, and housing mix. Both the developer and the City of Portland delivered on their agreement.

Have a detailed master plan in place. Hoyt Street Properties' staff noted that in retrospect, having a detailed master plan in place early in the process would have been more helpful than the block-by-block approach taken. Additionally, it is thought that the economy at the time would have supported a faster development approach.

Many factors made this neighborhood work. An urban renewal district, a City, and a developer(s) with a shared vision, a transit system that complemented and worked with land use, and public and private investment were all in place to make the Pearl District work.

References

- City of Portland, Bureau of Planning. 1980. "Goals and guidelines, Portland downtown plan." Retrieved from http://www.portlandonline.com/bps/index. cfm?a=58826&c=34248.
- City of Portland, Bureau of Planning and Sustainability. 2002. "South waterfront plan." Retrieved from http://www.portlandonline.com/bps/index. cfm?c=34291.
- City of Portland, Bureau of Planning and Sustainability. 1988. "Portland central city plan." Retrieved from http://www.portlandonline.com/bps/index. cfm?a=153706&c=44077.
- City of Portland, Bureau of Planning and Sustainability. 1996. "Portland central city plan." Retrieved from http://www.portlandonline.com/bps/index. cfm?a=88693&c=34248.
- City of Portland Bureau of Planning and Sustainability. 1995. "River district plan and University District plan." Retrieved from http://www.portlandonline. com/bps/index.cfm?a= 113040&c=34248.
- City of Portland, Bureau of Transportation. 2009. "Portland Streetcar concept plan." Retrieved from http://www.portlandonline.com/transportation.
- Diede, V., Portland Streetcar Project Manager, Portland Bureau of Transportation. 2010–2011. Personal interviews.
- Gerding Edlen Development. "Financing transit-oriented development." Retrieved from www.drcog.org/documents/MedlenTODslides.pdf.
- Gustafson, R., Executive Director, Portland Streetcar Inc. 2010–2011. Personal interviews.
- Hales, C., Former Portland City Commissioner. 2010. Personal interview.
- Macht, W. 2007. "Multi-block underground shared parking: A critical stimulus for mixed-use density." PSU Center for Real Estate Quarterly, 3rd Quarter. Retrieved December 16 2010, from http://portlandtransport.com/ documents/multi_block_parking.pdf.
- Portland Condos, LLC. "Pearl District: Bridgeport condominiums." Retrieved from http://pearl-district-lofts.com/pearl-district-bridgeport-condominiums. html.
- Portland Condos, LLC. "Pearl District: Johnson Street townhomes." Retrieved from http://pearl-district-lofts.com/pearl-district-johnson-street-townhomes. html.
- Portland Condos, LLC. "Pearl District: Park Place condominiums." Retrieved from, http://pearl-district-lofts.com/pearl-district-park-place-condominiums. html.
- Portland Condos, LLC. "Pearl District: Streetcar lofts." Retrieved from http:// pearl-district-lofts.com/pearl-district-streetcar-lofts.html.
- Portland Development Commission. "Downtown waterfront urban renewal plan." Retrieved from http://www.pdc.us/ura/dtwf/dtwf.asp.

- Portland Development Commission. 1999. "Hoyt Street property: Amended and restated agreement for development." Retrieved from http://www.pdc.us/pdf/ura/river_district/hoyt-street-properties/19990308-dda-amended.pdf.
- Portland Development Commission and Spencer & Kupper/boora. 2006. "Hoyt Street properties master plan." Retrieved from http://www.pdc.us/pdf/ura/ river_district/hoyt-st-property_master-plan.pdf.
- Portland Development Commission. 1999."North MacCadam urban renewal plan." Retrieved from http://www.pdc.us/pdf/dev_serv/pubs/dev_macadam_plan.pdf.
- Portland Development Commission. 2001. "Pearl District development plan: A future vision for a neighborhood in transition." Retrieved from http://www.pdc.us/pdf/dev_serv/pubs/pear l_district_devel_plan.pdf.
- Portland Development Commission.1998. "River District urban renewal plan." Retrieved from http://www.pdc.us/ura/river.asp.
- Portland Development Commission. 2008. "South Park blocks urban renewal plan." Retrieved from http://www.pdc.us/four/notice/councildocs/spb/ ExhibitC_SPB_Plan_5-15.pdf.
- Portland Development Commission. 2006. "South Waterfront Park redevelopment area." Retrieved from http://www.pdc.us/ura/north_ macadam/sowa-central-district.asp.
- Portland Development Commission. 1999. "Urban renewal framework plan." Retrieved from http://www.pdc.us.
- Portland Office of Transportation and Portland Streetcar, Inc. 2008. "Portland Streetcar development oriented transit." Retrieved from http://www. portlandstreetcar. org/pdf/development 200804 report.pdf.
- Portland Streetcar, Inc. "Construction overview: The Portland Streetcar loop project." Retrieved from http://www.portlandstreetcar.org/node/11.
- Portland Streetcar, Inc. "Facts at a glance." Retrieved from http://www.portland streetcar.org/.
- Portland Streetcar, Inc. "Portland Streetcar history." Retrieved from http://www. portland streetcar.org/node/33.
- Reconnecting America and Center for Transit-Oriented Development. "TOD 202: Station area planning: How to make great transit-oriented places." Retrieved from http://www.reconnectingamerica.org/public/show/tod202.
- Sweitzer, T., Hoyt Street Properties. 2010. Personal interview.
- Urban Land Institute. "Awards for excellence 2007 winner: The Gerding Theater at the Armory, Portland, Oregon." Retrieved from http://www.uli.org/ AwardsAndCompetitions /AwardsForExcellenceProgram/2007/The%20 Gerding%20Theater%20at%20the%20Armory.aspx?print=true.
- Wollner, C., J. Provo, and J. Schabaski. "Brief history of urban renewal in Portland." Retrieved from http://www.pdc.us/pdf/about/urban_renewal_ history.pdf.

Pearl District Neighborhood Data

Transit Operator Tri-Met/City of Portland/Portland Streetcar, Inc.

Transit System Name Portland Streetcar

Transit Corridor Name Portland Streetcar

Transit Mode Streetcar (SC)

Location (Metro Area) Portland, OR

Region (USA) Northwest

Station Name 11 Station Area - NW 13th & Lovejoy, NW 12th & Northrup, NW 10th & Marshall, NW 10th/11th & Johnson, NW 10th/11th & Glisan, NW 10th/11th & Everett, NW 10th/11th & Couch

Station Location Portland, OR

Station Typology* Urban Neighborhood

Role of Station within Corridor Destination and Commuter

Defined Neighborhood Size Corridor - 1-2 blocks on either side of stations

Land Use Description Land use in the Pearl District Neighborhood is primarily high density residential and mixed-use residential (active ground floor with residential above). Two main parks (Jamison Square and Tanner Springs) are featured in the neighborhood as well.

Redevelopment Plan/Special Zoning River District Urban Renewal Plan, Hoyt Street Properties Development Agreement and Central Employment zone

Land Use Standards that Encourage TSD

Governing Document Central Employment Zone

Densities No density limit within existing buildings, new development restricted by allowable FAR, setbacks, etc.

Building Heights Determined by allowable FAR, building setbacks and building coverages

Floor Area Ratios 3:1 Max. FAR with bonus of additional 3:1, or total of 6:1

Parking Requirements Residential: Minimum of 0 for 1-3 units and 1 per 2 units for 4+ units

Retail: Max. I per 200 SF (no minimum)

Restaurants/Bars: Max. I per 75 SF (no minimum)

Office: Max I per 400 SF (no minimum)

Medical/Dental: Max. I per 330 SF (no minimum)

Encouraged Land Use Mix Mixed Use, High Density Residential

Station Placemaking Features: 2 new public parks, public artwork, active streetlife

Significant Transit Supportive Development

1. Bridgeport Condominiums (1130 NW 12th Ave./1133 NW 11th Ave.) (2) 7-story, mixed-use buildings with 8,000 SF ground floor retail on (1) Portland block, or 0.9 acres. The east building has 56 units and west building has 67 units. Includes subterranean parking.

2. Streetcar Lofts (1030 NW 12th Ave.) Made famous by its industrial architecture and "Go By Streetcar" sign, this 3 to 6-story mixed-use building has 9,000 SF ground floor retail and 139 loft residential spaces on (1) Portland block, or 0.9 acres. A rooftop courtyard provides open space for residents and parking is underground."

3. Park Place Condominiums (922 NW 11th Ave.) (2) buildings - a 13-story tower and a 2-story low rise with 15,000 SF ground floor retail and one level of underground parking on 0.9 acres. The tower includes 124 units and the low rise includes 7 townhomes and live/work spaces with rooftop terraces.

4. Johnson Street Townhomes (1100-1199 NW Johnson St., 727-799 NW 11th Ave., and 746-798 NW 12th Ave.) 13 residential townhome units with private front door gardens and two-car garages - on 1/2 Portland block, or 0.45 acres.

5. Pearl Townhomes (601-637 NW 11th Ave.) 20 residential townhome units on (2) 1/2 Portland blocks, or 0.9 acres total. The buildings were converted from old railroad warehouses to townhomes in 2 separate phases. Each unit includes an attached garage.

6. The Brewery Blocks (Davis/Burnside Streets from NW 13th Ave. to NW 10th Ave.) A 5-block development (4.5 acres) including 365 residential units, 160,000 SF of retail (including a Whole Foods and Theater) and 538,000 SF office space. All parking for the development is included underground (1,350 spaces).

NOTES: * From CTOD's Station Area Planning: How to Make Great Transit-Oriented Place

Orenco Station, Westside MAX Blue Line, Portland, OR

Prepared by: New Jersey Institute of Technology Van Meter, Williams, Pollack, LLP

In the "Case Studies in Corridor Planning" section, a case study focused on Portland's Westside MAX Blue Line and the corridor-wide planning and implementation tools used to encourage transit-supportive development in the region. This section focuses on a single station neighborhood within the corridor and the specific public policies and planning tools used to encourage and enable transit-supportive developments. Highlights of specific transit-supportive developments are also provided.

Case Facts	
Station Name:	Orenco
Station Location:	Hillsboro, Oregon
Transit System Name:	MAX
Transit Corridor Name:	Westside MAX Blue Line
Transit Mode:	Light rail
Region (USA):	Northwest
Role of Station within Corridor:	Destination and commuter
Station Typology:	Transit Neighborhood
Municipal Characteristics:	
Location	About 17 miles west of Portland
Size	23.69 square miles
Population	92,350 residents (as of March 12, 2012)

Overview of Westside Max Blue Line

The Westside MAX Blue Line, completed in 1998, is 18 miles long, and includes 20 stations. The Blue Line runs through three cities, beginning in Portland (PGE Park Center), running through Beaverton, and terminating in Hillsboro (Hatfield Government Center Station) (see Figure 5B-52). The line serves as a commuter line and is unique because the corridor was planned and designed to accommodate anticipated growth consistent with an overall comprehensive future land use planning effort for the region. When initiated, the Westside Max Blue Line spurred a change in the rules of federal funding guidelines. Building a project based on projected land use had never before been attempted. An amendment added to the Full Funding Grant Agreement stipulated that unless TriMet used its best efforts to assure adoption of the regional plan as outlined in

the 2040 Growth Concept, the \$75M in federal funds would need to be repaid. There was little question that a collaborative planning effort would be necessary to bring the project to fruition, and every level of government was involved in the process.



Source: http://trimet.org/maps/railsystem.htm and Van Meter Williams Pollack, LLP

Orenco Station Neighborhood

The Orenco Station on the Westside MAX Blue Line is located in Hillsboro, Oregon, approximately 45 minutes on the Westside MAX Blue Line from Pioneer Square in center city Portland and 12 minutes from the last station on the line (Hatfield Government Center). The station is located in the former greenbelt town of Orenco, which is named for the Oregon Nursery Company. At the time the Westside MAX was being planned, Hillsboro had considerable undeveloped vacant land, which was relied on to accommodate the potential growth anticipated in the regional growth plan. Intel, a major employer in the region, has a major fabrication facility known as Ronler Acres located within a mile of the station. According to CTOD's typologies, Orenco Station would be considered a "Transit Neighborhood," characterized as having low- to moderatedensity residential uses, with supporting commercial and employment uses organized around a transit station. While primarily considered a commuter station, Orenco has a town center and provides attractions that serve as destinations for visitors. (See chart at the end of this section for data pertaining to the Orenco Station Neighborhood.)

For the purposes of this case study, the station neighborhood is defined as an area of approximately 200 acres north and south of the station. The rough boundaries are Butler Road on the north, NE Dogwood Street on the south, a tree buffer and Northeast 60th Avenue on the west, and Northwest 231st and Northwest 229th Avenues on the east (see Figure 5B-53). The two primary arterials are Cornell Road (running east/west) and Northeast 231st Avenue (running north/south). Orenco Station Parkway is a new north/south "main street" that runs north from the transit station and terminates at Butler Road. The defined neighborhood includes approximately half of the PacTrust master plan (see next section). Two residential developments north of Cornell Road and east of 229th Avenue, as well as the major regional retail destination, are not included for purposes of defining the established "neighborhood," the area that is easily walkable to transit. Land uses in the study area are predominately residential, including a mix of single and multifamily units. Building densities range from 5 units/ac for single-family to 60 units/acre for multifamily units.

Figure 5B-53

Orenco Station Neighborhood Study Area **ORENCO STATION NEIGHBORHOOD •** HILLSBORD, OR (WESTSIDE MAX LINE)



Source: Van Meter Williams Pollack, LLP

Planning for Transit-Supportive Development

Early planning for the communities along the Westside MAX Blue Line was the norm. Robust support from all of the regional agencies was evident. TriMet, in particular, strongly supported planning since it was heavily invested in the Westside Station Area Planning (WSAP) program, a collaborative effort between Metro (MPO), TriMet (transit agency), and local jurisdictions. The first step in the collaborative program was agreeing upon interim zoning guidelines, which, according to G.B. Arrington, a transportation professional involved since the project's inception, changed the legal framework and provided a solid base to build on. Hillsboro, Beaverton, and Washington County each adopted their own interim zoning guidelines, and commonalities included prohibiting lower-intensity uses, establishing higher minimum densities to encourage transit-supportive development, limiting parking requirements, and establishing a design overlay. In essence, the interim controls set the tone and the direction for future planning efforts.

Planning for the Orenco Station area varied from the norm in a region devoting enormous effort to integrating transit planning and land use planning. Although the City of Hillsboro designated the Orenco neighborhood as a Station Community Planning Area (a designation applied to other areas within a ¹/₂-mile radius around stations), that 1996 designation only partially explains the resulting Orenco Station development. PacTrust, a local commercial/industrial developer, had purchased considerable acreage near the abandoned electric railroad rightof-way, with the initial intent of extending the high technology campus concept that was gaining traction in the region. Through an urban renewal district, the City of Hillsboro had been assembling $\frac{1}{4}$ -acre lots in an abandoned subdivision property farther north in the area. Plans for the Westside MAX Blue Line altered both the developer's and the city's plans. The City of Hillsboro and PacTrust shared a new vision for the development of a transit village and began a collaborative planning effort. The result of the collaborative effort was the submittal of PacTrust's master plan, and the simultaneous adoption of new zoning provisions that permitted the proposed development (see Figure 5B-54).



Source: http://www.nahb.org/generic.aspx?sectionID=219&genericContentID=471&print=true

Figure 5B-54 Orenco Station Master Plan

Orenco Station Neighborhood's Transit-Supportive Developments

ORENCO STATION NEIGHBORHOOD • HILLSBORO, OR (WESTSIDE MAX LINE)

This section provides an overview of transit-supportive developments within the vicinity of the Westside MAX Blue Line's Orenco Station. Figure 5B-55 illustrates the developments' locations relative to the light rail station.

LEGEND 1994 EXISTING DEVELOPMENT AREA OF CHANGE (1994-2010) STATION: OPENED 1998 1/4 MILE RADIUS (5-MIN. WALK) SIGNIFICANT PROJECTS ORIGINAL ORENCO STATION CLUB 1201 AT ORENCO STATION (3) THE Q CONDOMINIUMS (4) NEXUS APARTMENTS (5) ORENCO GARDENS 00 П R 20000 0 0 00 57 **I** 00000 000 20 0 8 8 9 900 000 .5 A

Figure 5B-55

Areas of Change and Transit-Supportive Developments in the Orenco Station Area

Source: Van Meter Williams Pollack, LLP

Original Orenco Station

The PacTrust master plan (encompassing a 200-acre neighborhood) called for the eventual development of more than 1,800 dwelling units and 500,000 SF of commercial space. PacTrust was the primary developer with its residential partner Costa Pacific Homes in the planning and development of the 68 acres considered the Original Orenco Station (see Figure 5B-56), but sold the remaining 132 acres to other developers. Notably, the Original Orenco Station development was not on the properties closest to the light rail station. Since transit service was two years in the future when the master plan was approved, both PacTrust and the City of Hillsboro realized that success depended on transit, proximity, and access to Cornell Road, the major five-lane arterial street. Although the developers successfully argued against the road being widened, they appreciated and used the site's visibility and frontage on the arterial to design around two modes of travel. The Town Center that emerged from the planning process is a mixed-use main street with first floor retail, and offices or residences above. PacTrust recruits and selects tenants to provide an array of the community services requested by the residents. Not all of the original concepts worked, such as the envisioned "live work" units, which is now mostly residential townhomes. There is a diverse mixture of residential units ranging from small lot, single-family (3,500 SF) homes to townhomes and condomiums. Higher-densities were always envisioned closer to the station, and those parcels are anticipated to be the next phase developed. When Orenco Station emerged in the mid-1990s, the small lot, single-family units and townhomes were the first attempts in the Portland region at bringing an urban form of development to the suburbs.

Figure 5B-56

Original Orenco Station



Source: Van Meter Williams Pollack, LLP

Club 1201 at Orenco Station

Simpson Housing acquired 31.8 acres of land from PacTrust, south of Cornell Road and north of the Orenco light rail station, with a concept plan that included 804 multifamily housing units. Club 1201 was the first residential phase to be built south of Cornell Road and is only 100 yards from the Orenco light rail station (see Figure 5B-57). This 10-acre development includes 210 one-, two-, and three-bedroom condominums in 21 asymetrical buildings at 10 units per building. The first units were completed in March of 1999, and the project was sold out by 2001. Figure 5B-57 Club 1201 at Orenco Station



Source: Courtesy of Orenco Station HomeOwner's Association

The project, originally a rental apartment complex, changed to condominiums during construction. On-site amenities include a recreation center and clubhouse with community swimming pool, picnic area, basketball court, and playgrounds. Simpson Housing purposefully underparked the development—each of the 21 buildings includes only 12 spaces for 10 units. Thirty-nine extra visitor/overflow parking spaces are provided throughout the site, resulting in a total of 1.39 spaces per dwelling unit. Additional parking was added at the urging of the residents.

Q Condominiums

Located on the southeast corner of Orenco Station Parkway and Cornell Road are the Q Condominiums (see Figure 5B-58). This property, developed by Legend Homes, includes 62 one- and three-level townhomes with private patios and internal courtyards. In addition to each home's private space, the residents of the Q have full access to the adjacent Club 1201's amenities—basketball courts, spa and pool, meeting rooms, mini-theater, and two playgrounds. A small retail space currently used as a leasing office is available on the ground floor corner unit of this development. Parking for the Q Condominiums is handled through underground podium parking.





Source: Courtesy of Bob Stanfield

Nexus Apartments

Located at the southwest corner of Cornell Road and Orenco Station Parkway, this 422-unit apartment complex was completed in 2007, and encompasses approximately 14 acres (see Figure 5B-59). The site includes surface parking and carports, as well as an interior park with an outdoor swimming pool. Ground floor retail units are available. The site was developed and is owned by Simpson Housing, which also built Club 1201 condominiums.

Figure 5B-59

Nexus Apartments



Source: Van Meter Williams Pollack, LLP

Orenco Gardens

Located immediately south of the Orenco light rail station is a neighborhood known as Orenco Gardens (see Figure 5B-60), an 82.6-acre, master-planned community. In 2000, the site was sold to West Hills Development, Portland's largest homebuilder. The required density under the Residential Village zoning was 24 units per acre within 1,300 feet of the transit station. During public review of the master plan, concerns and complaints from the predominantly

single-family surrounding neighborhoods pushed the developer to upgrade corner lots with 360° architecture, add Craftsman detailing to a percentage of homes, include uniform fencing throughout the development, and add 10 acres of open space.





Source: Van Meter Williams Pollack, LLP

Orenco Gardens Apartments are located on 10 acres directly adjacent to the light rail station and include 264 multifamily apartments designed to attract young professionals. A 5,400 SF clubhouse and urban plaza connect the community to the light rail station. Orenco Gardens Rowhomes include 174 rowhomes and are located west of Orenco Gardens Apartments. The remainder of the development includes approximately 400 single-family homes. Several Oregon White Oak groves were preserved in open spaces to add to the character of the neighborhood.

Parking for the rowhomes and single-family homes is provided in private garages accessed by alleys. Street parking is also available. The higher-density Orenco Gardens Apartments is parked at 1.35 spaces per unit, below the minimum zoning standard of 1.50. The developer justified the reduced parking by counting the 150 on-street spaces along Birch Street for overflow parking, stating that these on-street spaces, when occupied, would protect pedestrians from moving cars. The direct adjacency to the light rail station was a factor.

Lessons Learned

Successful projects require a partnership. The City of Hillsboro had a redevelopment vision and was willing to invest in the concept. PacTrust understood the potential of the Westside MAX Blue Line project and shared the city's vision. The master plan and the design controls were a collaborative effort.

Small but important design details must be worked out in advance. Character-building elements, such as narrowed streets, alternative pavements, street lighting, compressed public utility easements, and above- or below-grade encroachments into rights-of-way must be resolved with city engineers and building officials before land use entitlements are issued.

References

- Ankrom Moisan Architects. "Portfolio: Orenco Gardens." Retrieved from http:// www.amaa.com/portfolio/project/?category=housing&project=126&redir=L3 BvcnRmb2xpby8/Y2F0ZWdvcnk9aG91c2luZyMIMA.
- Arrington, G. B., Jr., PB Placemaking. 2010–11. Personal interviews.
- City of Hillsboro Planning. "Station Community Planning Areas: Section 15. Hillsboro comprehensive plan Ordinance No. 2793-4-77." Retrieved from http://www.ci.hillsboro.or. us/Planning/HTMLcompPlan/Comp_Plan_Table_ of_Contents.aspx.
- City of Hillsboro Planning. "Hillsboro zoning ordinance Vol. II, Section 136: Land use districts Part II." Retrieved from http://www.ci.hillsboro.or.us/Planning/ HTMLzone VOL2/Vol2Section136-I-III.aspx#H.
- Cooper, C., Senior Planner, City of Hillsboro, Department of Planning. 2010–11. Personal interviews.
- Detweiller, J., Tri-Met. 2010–11. Personal interviews.
- Costa Pacific Homes. "Orenco Station." Retrieved from http://www.costapacific. com/orenco-station.php.
- Orenco Station Business Owners Association. "Orenco Station history." Retrieved from http://www.orencostation.net/index.php.
- Raber, D., Program Director, City of Hillsboro, Department of Planning. 2010–11. Personal interviews.
- Reconnecting America and Center for Transit-Oriented Development. "TOD 202: Station area planning: How to make great transit-oriented places." Retrieved from http://www.reconnectingamerica.org/public/show/tod202.
- Urban Land Institute. 1999. "Urban Land Institute development case study: Orenco Station case study." Volume 29, Number 01, Case Number C029001.

Orenco Station Neighborhood Data

Transit System Name MAX

Transit Corridor Name Westside MAX Blue Line

Transit Mode Light Rail (LRT)

Location (Metro Area) Portland, OR

Region (USA) Northwest

Station Name Orenco Station

Station Location Hillsboro, OR

Station Typology* Transit Neighborhood

Role of Station within Corridor Destination and Commuter

Defined Neighborhood Size Approximately 1/4 mile from station

Land Use Description Land use in the Orenco Station Neighborhood is primarily multi-family and single-family residential with a town center element that includes mixed-use buildings and a grocery store. Larger, regional retail is just outside the I/4 mile radius. A large park, ""Central Park," is integrated into the town center area.

Redevelopment Plan/Special Zoning Comprehensive Plan amendment (Station Community Planning Areas) and new zoning district (Station Community Residential-Village - SCR-V)

Land Use Standards that Encourage TSD

Governing Document Station Community Residential-Village (SCR-V)

Densities Minimum 24 DU/AC within 1/4 mile of station

Building Heights Minimum 2 stories within 800 feet of station), Maximum 3 stories

Floor Area Ratios 0.5 FAR (non-residential within 1/4 mile of station), 0.75 FAR (hotels within 800 feet of station)

Parking Requirements Retail/Service: Max. 5 per 1,00z0 SF

Office: Max. 3.4 per 1,000 SF

Single Family, Rowhouse/Townhouse, Duplex: Min. I per unit, Max. 0.9 per bedroom

Multi-Family: Min. 1.5 per unit, Max. 0.9 per bedroom

Senior/Student Housing: Min. 0.25 per unit, Max. 0.75 per bedroom

Encouraged Land Use Mix Residential and Mixed Use

Station Placemaking Features: Integrated Art and Neighborhood Park

Significant Transit Supportive Development

I. The Original Orenco Station (Intersection of Cornell Rd. and Orenco Station Parkway) 68-acre original town center and residential area featuring a 3-story mixed-use "main street", live/work units, a clinic and a New Seasons grocery store. The mixed-use town center area includes approximately 75,000 square feet of retail space and 25,000 square feet of office. The residential portion includes duplexes, triplexes and small lot single family homes. 8 acres of open space are included in two community parks.

2. Club 1201 at Orenco Station (1201 NE Horizon Loop) 10-acre site with 210 condominium units in 21 3-story buildings. Parking is handled through tuckunder parking and overflow site surface parking.

3. The Q Condominiums (1298 NE Orenco Station Parkway) 2-acre site with 62 residential units in 13 buildings over podium parking.

4. Nexus Apartments (1299 NE Orenco Station Parkway) 422-unit apartment complex located on approximately 13.8 acres at the southwest corner of Orenco Station Parkway and Cornell Road. Parking is located in surface lots and carports. A swimming pool and interior park is located on-site.

5. Orenco Gardens (6199 Northeast Alder Street) 82.6-acre master planned residential community including 274 apartments, 174 rowhomes and approximately 400 single family homes. The project also includes a 5,400 SF clubhouse and urban plaza that connects to the LRT station.

NOTES: * From CTOD's Station Area Planning: How to Make Great Transit-Oriented Place



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